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PREFACE

Most countries accept rising standards of living and a high and stable level of employment as their basic economic and social aims. The purpose of this study is to bring out the important contribution to be made by housing to the achievement of these aims. Moreover, for most countries, one of the most important undecided issues in social and economic policy is the extent to which private enterprise will need in the future to be supplemented by public planning. This issue emerges sharply in the case of housing, which has hitherto been left largely to private enterprise.

Chapter I discusses the present condition of housing in relation to the community's needs, and brings out the need for a housing policy. Chapters VI and VII propose certain general principles which should be embodied in a housing policy.

The content of these last chapters is based on an analysis of various aspects of housing in Chapters II to V. Chapter II analyses the relationship of housing policy and employment policy. Chapter III examines the factors affecting the cost of housing. Chapter IV shows how the level of activity is determined, and Chapter V shows that this level of activity is inherently subject to extremely wide fluctuations.

The greater part of the study is thus concerned with the analysis of certain economic relationships and their economic and social consequences and with the conclusions to be drawn from this analysis, rather than with the description of actual housing conditions or policies. While illustrative material is presented, no attempt is made to give a comprehensive survey either of the housing situation in different countries or of the measures taken to deal with it. Information on these topics is to be found in other sources, to which references are given in the study. Most of the illustrative material cited has been drawn from a limited number of countries in which the relationships analysed are particularly important and in which, partly for this reason, the most comprehensive information is available. Because of the wide variation in housing conditions and practices,

in income levels, and in economic and social conditions generally in different countries, both the analysis and the conclusions drawn from it will, of course, need in each specific case to be considered in the light of the particular circumstances of the country concerned.

The central problems of housing policy, the study suggests, are the achievement of greater stability of employment in the building industry, so that the industry may contribute to, rather than hinder, the achievement of a high and stable level of employment throughout the economy ; the reduction of costs, so that a wider range of people may be able to afford adequate housing ; and the payment of housing subsidies, so that the housing standards of lower income groups may be raised. These problems of housing policy are complementary. Any aspect of housing policy can be carried out so as to contribute to the solution of all the problems. The study therefore emphasises the need for a well-rounded housing policy which will achieve its aims as economically as possible. The study has been prepared in the Economic Section of the International Labour Office by Mr. R. I. Downing, under the supervision of Mr. E. J. Riches, Economic Adviser of the Office.

CHAPTER I

THE NEED FOR A PUBLIC HOUSING POLICY

A million and a quarter new houses a year are needed in the United States, 400,000 in the United Kingdom, 45,000 in Sweden, 80,000 in Australia, and millions more in other countries throughout the world — building figures never yet achieved in any of these countries. But the costs of decent houses are so high that many people cannot afford them.

If these houses can be built, men who might otherwise be idle will get jobs building them. In spending their earnings, they will create jobs for more men. If houses continue to be built, a vital section of total effective demand will be stabilised and the problems of full employment correspondingly simplified. Men with good jobs and a secure future can afford to pay for more adequate housing. If houses are being built and suppliers are assured of steady market prospects, workers and producers will more readily support the development of more efficient methods of production which will speed up and cheapen the production of houses. In a stable economy, the costs of financing the substantial capital investment involved in a house can be reduced. The cost of adequate housing will fall and may be expected to approach nearer to what can be afforded for his housing by a worker with steady employment prospects and a reasonable wage.

This is the nature and the significance of the housing problem. With good management, the building of badly-needed houses can itself contribute significantly to the solution of many of the difficulties that have obstructed, and are obstructing, the building of houses.

Housing Needs and Housing Standards

DEFINITION OF HOUSING NEEDS

Before examining the policy needed to achieve the building targets in various countries, the validity of these targets must be considered — how they are arrived at, what official sanction

they have, what popular sanction they have. The targets are determined by fundamentally similar methods for each country. A housing standard is defined — usually in terms of numbers of families per dwelling, standard of facilities per dwelling, and number and size of rooms needed for different families. These standards are largely arbitrary. They are based finally on what a particular investigator considers the needs of a family to be. However carefully he may collect evidence from people as to what they consider they require, he must finally make his own decision as to the standard he will adopt as the basis of his measurement of housing needs.¹ Sir Ernest Simon has summarised various estimates of the number of slum dwellings in England in the early 'thirties. The estimates vary from 10,000 on the basis of the worst cellar dwellings, to four million on the basis of houses which "certainly should be replaced".² Few of these investigations show any evidence of having been based on a thorough examination of the true cost to the community of a proposed building programme or of whether the community could or would wish to afford it. The realisation of the extent to which policy has been hampered, in the past, by an erroneous and unnecessary emphasis on the superficial aspects of money costs, has fostered a tendency to disregard costs in any sense. Yet the true cost of any project, in the sense of the alternative consumption and investment forgone in order to achieve it, should remain the all-important determining factor. Certainly, in economies where there would otherwise be large-scale unemployment, the only true cost of a

¹ The *Report on the Overcrowding Survey in England and Wales, 1936* (MINISTRY OF HEALTH, 1937) concludes that, of nearly nine million houses inspected, 321,554 or 3.8 per cent. were overcrowded. However, the report goes on to state, "a variation of the permitted number per dwelling by ten per cent. (it is not suggested that a variation of this precise form is practicable) would increase the number of families which would be overcrowded by about 380,000". In reviewing the Overcrowding Report, the *Economist* wrote. "Unfortunately, however, this figure [for overcrowding, etc.] is largely vitiated in the eyes of housing reformers by the fact that the standard utilised to test overcrowding was very low, and allowed living rooms to be used for sleeping purposes. A very different result would have been produced by the adoption of a standard more in accordance with the needs and habits of the people. Such a standard might well have raised the total of overcrowded dwellings to 800,000 or 900,000 or even more. The Minister of Health has already admitted that the standard of the 1935 Act is 'not to be taken as an ultimate one'." (*Economist*, London, 24 Apr. 1937, p. 192.)

² Sir E. D. SIMON : *The Anti-Slum Campaign* (Longmans, Green & Co., London, 1933), p. 125. On the question of definition of slum areas, see James FORD : *Slums and Housing* (2 vols.) (Cambridge, Harvard University Press, 1936), Chapter I.

housing programme is the leisure, or enforced idleness, given up by the men employed to carry it out. But cost becomes a real consideration in economies tending towards a condition of full employment, where employment of men in one type of production means that, to a large extent, they must be taken away from other lines of production on which they have been or might be employed.¹

It sounds plausible and attractive to set standards high and to say that any house should be replaced in 50 years, that each member of a family should have a separate bedroom and that the family should have in addition a living room, kitchen, bathroom and toilet facilities. But these aims will be possible of achievement only if they are consistent with all the other things the community wants to do. When all these things are added up, it may turn out that the community wants to do more things than can be done with its available resources. It will then have to re-examine its demands and decide which of them should be modified — and it may be that, for the time being, it will decide to reduce its housing standards in order to achieve other aims which it considers more important. A check of this sort, on the practicability of housing standards by reference to other aims of the community, might be provided by what has come to be known as the "manpower budget", a measure which developed rapidly and proved its usefulness under the stress of war economy. A manpower budget sets out, on the one hand, the present occupied population and the sources of possible further recruitment and, on the other, the number of workers required for various activities. If the supply of manpower is inadequate, decisions can be taken, on the basis of this information, either to seek extra workers from possible sources such as housewives, or to reduce some activities in order that the demand for workers may be brought down to equality with the supply.

An over-all check of the total demands of the community is, however, possible only to the extent that the community's

¹ A number of countries, notably the United Kingdom, quickly discovered in the post-war period that their reconstruction programmes, including their housing programmes, could not be carried out on the scale originally conceived. Housing programmes in all countries have been delayed by the aftermath of the wartime disorganisation of the building industry. Just as important, however, has been the heavy demand for labour in all sections of the economy, which has prevented building industries from recruiting sufficient labour to achieve the housing targets set for them by Governments eager to do too much at once for their people

demands can be ascertained. In a totalitarian economy, to which a war economy approximates, an over-all check can be maintained because to a large extent the community's demands are dictated by the administrators. But in a free economy such as exists in most countries in peacetime, the community's demands are the sum of countless individual decisions as to how people will spend their incomes, given prevailing market prices. It is possible to measure approximately how people have spent their incomes in the past. It is even possible within limits to make reasonable estimates of how they are likely to spend their incomes in the future. Far deeper problems are involved, however, when enquiry is made as to how people would like to spend their incomes if these incomes were greater, and if people were given the opportunity to have more and better houses and more and better goods and services of other types. Yet in any economy, whether its structure of production is determined by central planning or by the interplay of individual decisions, serious consideration must be given ultimately to the desires of the consumers.

It is necessary, therefore, for the purpose of estimating the need for houses, to seek to develop a criterion which will be objective and which, at the same time, will not conflict with all the other demands of the community. At this stage, it should be noted, it is a question of the housing needs of a given population, and not of the requirements for housing arising out of changes in the size, composition and location of that population.

This need for housing will include in the first place the housing demanded by people who can afford to pay a price or rent that will cover the cost of that housing, given current cost conditions and given the level and distribution of incomes. In most economies, this demand will be accepted as a demand which need not be questioned. Being backed by willingness to pay, the demand will eventually be effective in calling forth an adequate supply. Indeed the real fear is that this market will be over-supplied as a result of the activities of speculative builders. Whether this section of demand can or should be satisfied immediately and, if not, what priority should be accorded to it, and the extent to which this demand will be affected by changes in building costs and by changes in income distribution, are questions which will affect the volume of resources devoted to meeting this demand at any time; but they leave undisturbed the fact that there is and always will be a substantial demand for houses from people who can afford to pay enough to meet the costs of their housing.

There will be some people who will maintain that the need for housing is confined to this "effective demand". If this were so, the housing problem would be essentially a short-term one, similar to the transition problems of all industries whose production has been disrupted by war. Such people will insist that, by and large, families have been able to get the houses they wanted and could pay for, apart from an exceptional period such as was experienced after the last war. They will readily admit that there are serious short-term problems of scarce labour and of scarce materials, of prices that are high both absolutely and in relation to what might be expected as their long-term level; but they will maintain that these are problems that can be solved along with other transitional problems. They will insist also that private enterprise has served well in the past to meet this demand for houses and will continue to do so in the future; that private enterprise is the best available system for ensuring that the varying types and sizes of houses and their accompanying services are supplied, in the quantities required, to those who demand them. The present high costs of building will fall as supplies and production are reorganised and as labour becomes available. The forces of competition will ensure this more potently than could any form of Government interference. They will argue that, while private enterprise can perfectly well fit in with neighbourhood, town and regional planning, there is no need for Government intervention to prescribe a programme for the number and type of houses to be built, or to lay down a system of priorities to determine in what order various consumers should obtain houses.

This argument is plausible. It might be that the building of comparatively few houses — far fewer than the numbers postulated by various investigators — might quickly quiet the present worldwide public outcry about the housing shortage and might even establish a housing vacancy rate which could be pointed to as evidence that no housing shortage existed. The official and unofficial estimates of shortages, however, cover a much wider field than housing demanded by people who can pay for their requirements. These estimates provide also for houses needed, or conceived by the investigators to be needed, by people who are not paying prices or rents high enough to call forth a supply of houses to meet this need.

It is this section of housing needs which, if it is to be satisfied, will require the development of a State housing policy. These needs can conveniently be divided into two subsections. A carefully planned State housing policy, by developing

improved organisation of the production and finance of housing and by taking careful account of the housing needs of families, may be able to effect a significant reduction of the costs of purchasing or renting houses and an improvement in the quality of houses. As a result, some of the families who previously were unable to meet the costs of the housing they needed would be enabled to do so. Furthermore, since all housing costs would be reduced as a result of successful public action in this direction, people who were in any case able to meet the costs of housing would also enjoy the benefit of the effects of public policy.

There will, however, remain a substantial number of families who will, even with reduced costs, still be unable to meet the costs of the housing they need. This section of housing needs will, if it is to be satisfied, require the State to meet a substantial part of the costs.

The fundamental components of a State housing policy are therefore the reduction of housing costs and the grant of assistance to families unable to meet the costs of their housing needs. The means by which this policy is put into effect — through co-operation with or control of the private building industry, through direct building of houses by Governments, through financial grants to builders, through rent or income subsidies to individual families or through any other of the many possible methods — will vary from country to country and from time to time. What is essential is that the need for public action in the field of housing should be accepted.

Before this need can be established, it will be necessary to dispose of certain objections that may be raised. For instance, since in normal times everyone does have some sort of housing accommodation, it may be questioned whether any improvement of housing standards is really necessary. Secondly, it may be argued that the real trouble is that lower income groups spend their money unwisely and are unwilling to allocate a due proportion of their expenditure to housing. Thirdly, it may be argued that private enterprise offers the best opportunities for maximising the efficiency of production and that Governments would be unable to secure any reduction of costs below the level achieved by private industry. Finally, it may be argued that incomes are already distributed in accordance with the community's concepts of social justice and that no further redistribution is required. If these objections could be sustained, there would be no case for a public housing policy. In fact, however, none of them is valid.

HOUSING STANDARDS

There are no absolute and universal standards of housing, and it is impossible to develop such standards. For one thing, the specific requirements which need to be met in order to safeguard health and to assure a given standard of comfort vary greatly in different climates and locations; and, more important, what is regarded as an adequate standard of comfort will be determined according to local customs and local levels of income, and in response to long-term increases in real income and changes in taste and social conscience. It is easy to list the considerations that should be taken into account in determining housing standards — “ . . . adequate light and ventilation, adequate sleeping accommodation to provide healthy conditions, adequate living space so as to avoid the frictions which arise from overcrowding, an allotment of land sufficiently large for general use by the family, and adequate and well-designed living space with modern equipment for all functions so as to reduce work and eliminate household drudgery ”.¹ This is but one of many equally satisfactory statements. To translate such a list of principles into terms of living space and facilities is a different matter. In fact, there are nearly as many housing standards as there are investigations into housing requirements.²

The one thing that is common to all the standards that have been set up is that, by them, the housing of virtually every nation is seriously deficient. Have these standards been set too high? No definite answer can be given to this question, as it is not possible to say how much of its resources a community should, or would wish to, devote to housing. Evidence can, however, be produced to show that current housing conditions are in many cases so bad as to have serious adverse social effects. This evidence suggests strongly that most countries would gain by an improvement of their housing conditions. Any report on or investigation of housing abounds in this evidence of the existence and evil effects of slums. A few typical instances are quoted.

The United States Federal Census of Housing, taken in

¹ AUSTRALIA, DEPARTMENT OF POST-WAR RECONSTRUCTION, Commonwealth Housing Commission : *Final Report*, 25 August 1944 (Canberra, 1945), par. 618.

² For a review of some of the housing standards that have been set up, see INTERNATIONAL LABOUR OFFICE : *Housing Policy* (Montreal, 1945), pp. 4-8.

1940, provides one of the most complete records of housing conditions. The Director of that Census wrote ¹:

The Housing Census obtained reports on 35,025,873 home units as to the need of major repairs and the presence or absence of plumbing equipment. Of this number reporting, 17,234,195, or 49.2 per cent., either needed major repairs or had no private bath. Specifically, those needing major repairs numbered 6,413,553, and home units without private bath totalled 15,855,246.

Houses with major deficiencies were, as would be expected, concentrated in the low rental group. Of non-farm dwelling units, 74 per cent. of those needing major repairs, 90 per cent. of those lacking running water, and 72 per cent. of those lacking private bath and toilet, were in the rental groups of less than \$20 a month. Ninety-four per cent. of dwellings of rental value less than \$10 a month, and 60 per cent. of dwellings of rental value between \$10 and \$20 a month, were deficient.²

It was estimated that, of total urban dwellings in the United States in 1940, nearly one third were in slum areas. Of these 6,800,000 slum dwellings, 5,000,000 were substandard by reason of the condition of the dwelling itself, and 1,800,000 dwellings — borderline cases which might otherwise have been satisfactory — were engulfed in the mass of bad housing. The slums, moreover, were by no means concentrated in large cities · 19 per cent. were in cities of 500,000 or more people, 23 per cent. were in cities of between 100,000 and 500,000 people, and 58 per cent. were in cities of less than 100,000 people.³

The social effects of these living conditions are striking. In slum areas in Detroit, Michigan, the death rate from pneumonia was three times as great as in normal residential areas, the incidence of crime was five times as great, the infantile mortality rate was six times as great, and the tuberculosis death rate was ten and a half times as great. In Cleveland, Ohio, a slum area with a population of only 0.03 per cent. of the city's total had, of the city's totals, 4 per cent. of larcenies, 5.7 per cent. of robberies, 7.8 per cent. of juvenile delinquencies, 10.4 per cent. of illegitimate births and 21.3 per cent. of murders.⁴

The costs of these slum areas are high. In Birmingham, Alabama, in twenty-two blighted areas, the expenditure of the

¹ J. C. CAPT : "A Hundred-Billion Dollar Plant", in *Domestic Commerce*, 16 April 1942.

² NATIONAL HOUSING AGENCY : *Housing Facts* (Washington, 1946), pp. 14-15.

³ *Ibid.*, p. 18.

⁴ *Ibid.*, p. 20.

municipality was three times its income from those areas. In Atlanta, Georgia, slum areas contributed 5.5 per cent. of the city's real property tax revenues but cost the city 53 per cent. of its police, health, fire and other service costs.¹

It is, of course, easy to point out that low incomes and poor education, not bad housing, were the fundamental causes of these revealing disparities in health and social conscience. But better housing would itself have a direct effect on health and morals and, as will be discussed later, would have also, indirectly, a substantial effect in raising incomes.

There is a comfortable and widely believed myth that it is the slum-dweller who creates the slums by his slovenly habits, and not the lack of decent housing at reasonable prices. This myth, solidly founded on the normal person's desire to escape from blaming himself for the poor living conditions of so many people, and carefully fed by the propaganda of slum owners insisting that their tenants would keep coal in a bath-tub, has been thoroughly exploded not only by experience in housing and slum clearance projects, but also by the evidence of efforts made by slum-dwellers to maintain standards as decent as possible even in their slum conditions.²

The extent to which people all over the world have responded to revelations of housing conditions in their own countries with demands for a policy for more sanitary housing is itself evidence of the fact that the community does really wish to improve housing standards, and is willing to approve expenditure of a greater part of national income on improving housing standards.

WILLINGNESS TO SPEND ON HOUSING

It cannot be doubted that many people tend to be irrational in the allocation of their spending. In order to spend money on the cinema, cars, drinks, tobacco and gambling, some people may restrict unduly their spending on food, clothing and housing. It is reasonable then to ask whether a community should pay heavy subsidies on houses when this might

¹ *Ibid.*, p. 22. Similar figures are recorded in the report on *The Cost of Slums in Newark* (Housing Authority of the City of Newark, 1946). For a thorough and careful discussion of the relation between housing and mortality, disease, health, crime and anti-social behaviour and of the social costs of inferior housing, see James FORD, *op. cit.*, Chapters XIV-XVIII.

² See, for instance, Nathan STRAUSS : *The Seven Myths of Housing* (New York, Alfred A. Knopf, 1944), Chapter VIII.

not be necessary if people spent their money more wisely. Should the community be expected to subsidise those who use unwisely their freedom of choice in expenditure?

This question raises difficult subjective problems of morals to which it is impossible to give a firm answer. In any case, irrationality is one of the facts of life which will never be completely eradicated and which, while it may be reducible, will be so only as the result of a long-term programme of education in social and personal responsibility.

However, the evidence is clear that, in general, people in the lower income groups are spending too much rather than too little on housing. It occupies a special position in family budgets. The minimum housing that is essential to keep a family alive already represents a substantial amount of housing. All investigations of family budgets show that, while families with higher incomes spend larger *amounts* on rent, the *proportion* of rent to income steadily falls. The figures given in table I are significant.

TABLE I EXPENDITURE ON VARIOUS ITEMS BY INCOME LEVEL¹
IN 42 CITIES IN THE UNITED STATES, 1934-1936

Percentage distribution

Item	All families	Families with average annual expenditure of							
		\$736	\$871	\$1,116	\$1,372	\$1,630	\$1,872	\$2,159	\$2,415 and over
Food . .	33.5	37.1	37.1	35.9	34.5	33.2	31.9	31.6	31.3
Housing .	17.1	21.8	20.1	19.4	17.9	17.3	16.0	15.0	13.6
Fuel, light, refrigeration	7.1	9.8	8.8	8.4	7.7	7.0	6.5	6.3	5.0
Clothing	10.6	6.8	8.5	9.1	9.9	10.6	11.2	11.9	13.7
Other items	31.7	24.5	25.5	27.2	30.0	31.9	34.4	35.2	36.4
Percentage of all families .	100.0	0.5	7.1	19.8	24.2	21.0	15.7	5.8	5.9

¹ U.S. DEPT. OF LABOR *Money Disbursements of Wage-Earners and Clerical Workers, 1934-36*, Summary Volume, Bulletin 638 (Washington, Government Printing Office, 1941), p. 13.

Expenditure on housing, and on the closely related item of fuel, light and refrigeration, is higher for the five lower income groups, who make up over 72 per cent. of the whole group, than

it is for the community average. The proportion by which their expenditure on these items exceeds the community average is substantially greater even than in the case of food. A relatively high expenditure on housing is maintained at the expense of items like clothing, furniture, automobiles and motor-cycles, medical care and recreation, in all of which there is in these income groups a substantial deficit below the community average. The conclusion from these figures and similar ones for other countries is that low income groups are paying out excessively large proportions of their incomes for housing.

The priority given to housing expenditure in family budgets is shown by an examination of the differences in distribution of expenditure in various income groups (table II).

TABLE II. PROPORTION OF INCREMENTS OF EXPENDITURE
SPENT ON RENT, FOOD AND CLOTHING
IN 42 CITIES IN THE UNITED STATES, 1934-1936

Average total expenditure	Increment of expenditure	Percentage spent on		
		Rent	Food	Clothing
\$ 736	First 736	21.8	37.1	6.8
871	Next 135	11.1	37.1	17.8
1,116	,, 245	17.1	31.8	11.5
1,372	,, 256	11.3	28.2	13.3
1,630	,, 258	13.6	26.4	14.3
1,872	,, 242	7.9	23.2	15.7

In the lowest income group, a high proportion is expended on rent. Out of the first increment of expenditure, the amount spent on food is maintained but, minimum housing having been obtained, extra expenditure on rent is limited in order to obtain clothing. Out of the next increment, a better standard of housing is sought, and so on. Eventually the proportion spent on rent drops substantially. This phenomenon of a high initial expenditure on rent followed by a sharp drop and later variations is a feature common to family budgets in all places that have been investigated.¹ It suggests strongly that no weight need be given to the charge that people in the low income

¹ H. W. SINGER: "Income and Rent", in *Review of Economic Studies*, Vol. IV, p. 145.

group are unwilling to spend a due proportion of their incomes on housing.

HOUSING COSTS

The problem of housing costs is fully discussed in Chapter III below. Partly in an attempt to protect themselves against the great instability that is characteristic of housing activity, producers of materials and workers in many countries have organised themselves into strong groups which exert an upward influence on prices and labour costs throughout the industry. In this industry particularly, a significant reduction of costs would result from a greater stability of output and the organisation of co-operation and research among large numbers of separate producers, to secure which will inevitably require some degree of public intervention. Furthermore, as a result of the large amount of money required to finance the ownership of a house, financial charges play an important role in housing costs. There is scope for public intervention both to reduce interest rates and to bring about an improved organisation of the mortgage market

DISTRIBUTION OF INCOMES

While costs in the housing industry tend to be high, the incomes of many families in the community are low and unstable. Incomes, particularly in the lower wage groups, fluctuate substantially and sometimes practically disappear. This has two consequences. In the first place, the fact that their incomes fluctuate and are less than they would be if all potential bread-winners were more fully and more usefully employed, means that families wanting houses are able to pay less for housing than they could if the economy in which they work assured to them full and useful employment. Secondly, the fact that incomes fluctuate means not only that expenditure, including expenditure on housing, fluctuates, but also that families are uncertain as to their future income position. They will tend at times to be unduly optimistic and at other times to be unduly pessimistic. This will be reflected in unnecessarily wide fluctuations in the amounts to which they are willing to commit themselves for housing expenditure. A Government policy which succeeded in assuring more regular and productive employment to all breadwinners would therefore result in higher and much more stable expenditure on housing.

Finally, the community may consider that, even with costs reduced as much as possible and with full and useful employment assured to all breadwinners, the standard of housing that can be afforded by certain sections is still so low as to require the payment of housing subsidies. Similar transfer payments, in the form of old-age pensions, education, health and other social services, are familiar and widely accepted as necessary and justified. Housing subsidies are beginning to be accepted as a contribution to the continual process of redistribution of income. The special importance to the community as a whole of the housing standards enjoyed by the lower-income groups can be relied on to justify some part of income redistribution being tied to housing expenditure, rather than being available for spending on any goods or services chosen by the recipients.

Importance of a Public Housing Policy

Bearing these points in mind, it should be possible to agree that, in an economy in which the demand for and supply of housing were in equilibrium, the need for housing would be satisfied if all members of the community were and expected to remain fully employed, in the sense that anyone willing to work for current rewards could expect to find work within a reasonably short time ; if the distribution of income in all forms corresponded to the currently accepted standards of social justice ; and if all prices were a true measure of marginal social costs of production.

If the world's economies were of this nature, it might well be argued that no special public housing policy would be required. The ordinary competitive market forces would then ensure that an adequate supply of houses of the types that people wanted would be readily forthcoming. In fact, however, the effects of monopoly and of unemployment are so widespread that nowhere in the world does an economy approach anywhere near to this standard. One of the most active current public controversies throughout the world is concerned with whether Governments should intervene to promote the realisation of this sort of economy and, if they do intervene, with how far and in what directions the intervention should be exercised.¹

It would be unfortunate if a solution to the housing problem had to wait on the outcome of this controversy. But it need not and will not. Regardless of the general question of how far economies should be publicly controlled, public housing policies are in any case essential and have, in many countries, already begun to be developed. The bad condition of housing is one of the outstanding deficiencies of existing economic systems throughout the world. Specific action to rectify it cannot be allowed to wait on the gradual development of a better economic system. Moreover, even if it were finally agreed that Governments should interfere extensively to improve economic systems, a specific public housing policy would still be essential as it would inevitably be one of the main instruments in a general economic policy.

Specifically, the following reasons may be advanced to support the argument that a public housing policy is essential :

(1) Housing is a vitally important determinant of the general level of employment. As a large investment industry, it can contribute significantly to the absorption of savings in countries where savings tend to be in excess of investment opportunities. In the past, housing activity has been subject to more violent fluctuations than any other significant industry. There is every reason to suppose, as will be discussed later¹, that in the absence of public intervention this "boom and bust" cycle will continue. The industry is so large that its condition substantially affects the level of employment and income in the whole economy. Action to stabilise housing activity is vital to any policy directed towards stabilising the level of employment.

(2) It has already been emphasised that housing standards are unduly low and that their improvement is essential to an improvement in standards of living. But there is another direction in which housing policy can contribute to an improvement in real incomes. The allocation of resources to the housing industry is too great relatively to its product. A housing policy which succeeded in reducing the degree of monopoly and improving efficiency could secure the production of more houses with the same amount of resources or of the same houses with a substantially smaller amount of resources.

(3) The size of the investment involved in houses in relation to the incomes of purchasers, the long-term risks attaching to

¹ See Chapter V below.

the investment, and the imperfections of the mortgage market, all warrant special attention being given to the problems of the finance of housing.

(4) Better housing produces important indirect benefits. The community gains greatly in its health, moral welfare, efficiency and aesthetic appearance. These, however, are benefits which will not influence the calculations of private producers who do not profit directly from them. Specific public action is therefore necessary if these benefits are to be secured.

(5) The shortage of housing in the immediate post-war period is so acute and costs of housing are so abnormal, in relation both to past experience and to what may be expected in the future, that all the resources of public planning and organisation should be thrown in with normal private building activity in the effort to overcome these difficulties.

(6) The product of the housing industry is an almost completely immobile asset. The individual purchaser will often be unwilling to invest in the purchase of a house which may become useless to him if he has to change his job, but which he may be unable to sell without excessive loss, particularly if many workers in the area are faced simultaneously with the need to move. The community needs flexibility of its resources, including mobility of labour, to maintain efficiency. It should be prepared to assist in meeting the costs of this flexibility.

(7) There is not only no incentive to slum owners to clear their slums and improve housing standards but, on the contrary, as a result of overcrowding, slums are a profitable form of investment. Health ordinances are incapable of clearing slums.¹ In any case, it is impossible and inhuman to clear slums unless alternative homes are provided at reasonable rents and prices.

(8) Building codes, ordinances affecting land use and improvement, and other types of regulation already represent a substantial policy of public control of housing. Zoning and public planning of neighbourhood, town and regional development are now being recognised as essential to the efficient use of national resources and to the avoidance of the development of blighted areas.

(9) Finally, as has been pointed out earlier, redistribution of incomes has already assumed important proportions in practically all countries. Housing subsidies, which are flexible and capable of rapid expansion, play an important role in this process in certain countries.

The Development of Public Housing

Before the first World War, public authorities had nowhere made any substantial excursions into the field of housing. The housing problem was already piling up during the nineteenth century when the tremendous increase of urban populations was putting great pressure on urban accommodation. Public authorities for the most part considered themselves fully occupied in providing water, sanitation, transport and police services, and a certain amount of control through zoning and land policy. Housing was expected to be taken care of by private enterprise. The public conscience was not highly developed and found little cause for concern in the appalling living conditions of the bulk of the people. Housing standards generally were low and since, for instance, even the upper classes rarely bathed, there could be no public outcry for a bath in every house. Perhaps the most significant factor was that it was, by and large, a period of great and expanding investment opportunities. People would have considered it wasteful to devote substantial resources, especially under public direction, to rehousing people who were already, somehow or other, living in some kind of shelter, when there were so many opportunities for profitable investment, the advantages of which in terms of higher productivity were readily apparent. At the same time, simply because there was no obvious and chronic problem of idle resources, there was no incentive deliberately to seek useful forms of investment or consumption on which idle resources could be used. Moreover, for many countries, the greater part of the nineteenth century was a period of peace during which production generally, including building, could go on year after year uninterrupted by war, so that there was little destruction of existing houses and the total supply of houses did steadily expand. However, houses, cities and transport systems grew at the dictate of various sections of the system of private enterprise. Improved housing standards and town planning were not regarded as important.

Towards the end of the century the acuteness of the housing shortage did lead to some action by public authorities but always

on a haphazard, piecemeal basis. Such action as was taken was not inspired by any feeling of civic responsibility for housing standards and town planning. It aggravated rather than abated the agglomeration of slums that blotted the face of the world.

Vertical slums abroad, horizontal slums in England. Over-crowding both of land and people. In neither case were the dwellings based on human needs, and the people were cut off from the living tradition of urban as of rural life. For in all industrialized countries the growth of factory towns got completely out of control, perhaps most in England where industrialization was first and most rapid, and the dwellings built in response to urgent and unremitting industrial demand became the slum areas which are causing so much trouble and expense to clear today.

Meanwhile, too, the overcrowded cores of industrialized towns went rotten. Fine houses built by prosperous citizens were spoilt by the encroachment of industry and poorer buildings. The owners moved to more spacious and healthy areas farther out, while their houses became shelters for a family on each floor, sometimes a family in each room, sometimes for more even than that, without any structural alterations being made to meet the changed conditions. Over-crowding and the indiscriminate siting of new industries combined to add to the complications of the housing problem.

In addition to difficulties caused by unplanned urban housing, there was a real sociological problem. A new class of landless men had been created, dependent on the machine, precariously employed, isolated from the normal simple enjoyments of life and of healthy recreation, unable to supplement their livelihood from small holdings, easily starvable, nervously suggestible, congested in blocks of airless tenement barracks on the Continent, marooned in smoke-infested cities in England.¹

By the end of the century the public conscience had been awakened and increasing interest was taken in housing matters. The first World War, by suspending building in Europe and disrupting it elsewhere for four years, and by increasing the cost of materials, labour, land and money, precipitated a state of crisis in housing for a solution of which it was inevitable that communities should turn to their Governments. There was, however, one factor which promised some relief: the abnormal rates of nineteenth century population growth had slackened in most European countries and, to that extent, the need to provide new houses for additions to population was reduced. A greater

¹ Elizabeth DENBY : *Europe Re-housed* (London, George Allen and Unwin, 1938) n. 97

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¹ Elizabeth DENBY · *Europe Re-housed* (London, George Allen and Unwin, 1938), p. 27.

concentration on improving existing housing standards was possible.

Public housing policy developed first in Europe, and later in the United States, Canada, Australia, New Zealand and other countries. Only in Europe was public housing policy responsible for a substantial proportion of total housing built in the inter-war period. In other countries it was beginning to play a more important role towards the end of that period — for instance, in the United States for the two years 1939 and 1940, public building provided 11 per cent of total new urban housekeeping construction¹ — but it had not been long enough established to make a substantial contribution to the total problem. Table III shows the part played by public housing policy in four of the European countries in which public housing was developed to an important extent.

TABLE III. RESIDENTIAL BUILDING AND FINANCE
IN VARIOUS COUNTRIES, 1919-1936¹

Country	Total dwellings built (thousands)	Percentage built by		
		Municipal enterprise	Co-operative and public utility	Private enterprise
Great Britain	3,574	30.6	12.9 ²	56.5
Germany	3,280	15.0	26.2	58.8
Holland	782	7.2	17.8	75.0
Sweden ³	282	5.6	11.4	83.0

¹ Elizabeth DENBY, *op. cit.*, p. 251.

² In the case of Great Britain, this classification is not "co-operative and public utility", but "subsidised private enterprise".

³ Swedish figures cover only two fifths of population

Private enterprise clearly remained the most important source of building in most countries. But, equally clearly, building by public authorities had become for the first time an important source of supply. It gained greater significance, of course, from the fact that it concentrated on the provision of houses for the lower income groups whose needs had hitherto been inadequately met by private enterprise.

Public housing policies depended principally on financial support from public authorities in the form of subsidies and

¹ TWENTIETH CENTURY FUND : *American Housing* (New York, 1944), p. 367.

credit facilities. Subsidies took the form either of lump sum payments or of annual payments for more or less lengthy periods. The former represented in effect payment of part of building costs ; the latter were intended to cover part of the annual charges of the building.

Of equal importance was support given by authorities in the form of credit facilities. By assisting builders to raise capital on more advantageous terms, the authorities lowered annual interest charges and enabled rents to be correspondingly reduced. The simplest form was a guarantee that interest and amortisation charges would be regularly met. This eliminated the risk factor for the lender, permitting money to be borrowed more cheaply, and required direct financial assistance from the authorities only when the borrower was unable to meet his obligations. A second form of credit facility was for the Government to undertake regular payment of part of the interest and possibly of the amortisation charges. A third form was for the Government to provide funds at less than market rates, and to bear the loss itself. Finally, in addition to direct financial assistance, public authorities in some cases also encouraged housing by exempting dwellings from taxation, by providing builders with sites on easy terms or by endeavouring to promote a reduction of building costs.

To ensure that assistance was confined to dwellings for people in lower income groups, the grant of public support was naturally made to depend on the observance of specified conditions relating to the standard of dwellings built, the disposal of houses by sale or by lease, the class of occupants and the bodies to be responsible for the work.¹

The result of intensive public and private building between the two World Wars was that the over-all housing shortage was substantially reduced, but that enormous work still remained to be done to provide adequate housing for the lowest income groups, and to improve the housing of the greater part of the population. Little progress had been made anywhere with the problem of town planning, and the larger problem of redistribution of population according to regional plans was practically untouched. The second World War has gravely accentuated the problem of housing. Building has been interrupted for a

¹ No attempt is made here to give more than a broad outline of the forms of public assistance to housing in various countries. This subject has already been exhaustively dealt with. See, for instance, INTERNATIONAL LABOUR OFFICE *Housing Policy in Europe*, Studies and Reports, Series G, No. 3 (Geneva, 1930); and Elizabeth DENBY, *op. cit.*

longer period, and to a much wider extent, than in the first World War. Many houses and cities have been destroyed.

Communities throughout the world, however, have now accepted a much greater degree of responsibility for the welfare of their members and particularly for the condition of housing. In most countries, public appreciation of the significance and possibility of achieving and maintaining full employment has risen to a point where communities will no longer tolerate men and resources being left in idleness, when production of desirable assets such as houses is urgently needed, even though many families cannot pay the costs of the houses they need. In many countries, moreover, the urgency of this need for housing is so strongly felt that public opinion will insist on priority being given to house building, even though the demand for other things may be backed up by adequate purchasing power.

Public and Private Enterprise in Housing

All the evidence from the past, and investigation of present conditions, emphasises that the housing problem cannot be solved by private enterprise alone. While the building industry has shown itself able to meet the needs of higher income groups, it has badly failed to meet the needs of the lower income groups.

... there is one primary necessity of a good life that \$30 a week will not provide in most urban communities and that is adequate shelter. And where it will provide adequate shelter it will not provide housing on a scale even approaching the standards of comfort, convenience and luxury that the \$30-a-week man obtains from his other expenditures. The spending of \$30 a week and less very largely supports U.S. industry, with one important exception. That exception is the disorganised and warring group of organisms known euphemistically as the building industry. In fact, the building industry by and large does not look on the mass market as a primary or even possible market for housing, and whatever technical advances it has made have been in the field of ornamentation rather than of cost reduction. Whether the fault lies with the industry itself, or with uncontrollably high basic building costs, or with government-housing policy, the fact remains that the situation is bad for the building industry, bad for society, and most immediately and painfully bad for the \$30-a-week family and its less prosperous neighbors.¹

Figures appear in nearly every publication on housing to prove the extent to which private enterprise housing is

¹ Cf. TWENTIETH CENTURY FUND, *op. cit.*, p. 130.

available only to the upper income groups. For instance, in the period 1935 to 1940, two thirds of all United States families, urban and rural, had incomes of less than \$150 a month. Of all the housing for which the Federal Housing Administration insured mortgages in these years, only 1.9 per cent. rented for \$30 a month or less and was therefore within the means (assuming families could afford to allocate 20 per cent. of their incomes to housing) of families with incomes of less than \$150. In 1938, 96 per cent of all private residential construction in cities was within the means only of families with incomes of more than \$1,500 a year. But only 40 per cent of the families in those cities had incomes above that amount.¹

To a great and dangerous extent, the supply of housing to lower income groups has been left to depend on the vacating of depreciated houses by higher income groups. This has led in the past to a deplorably low standard of housing for lower income groups, and to a failure to tap a huge reservoir of demand for useful production.² Unless this policy is changed, there is every reason to expect that, in the relatively near future, houses will be produced in excessive numbers for the higher income groups, which will result in a depression in the building industry at a time when the real need for housing would demand a steady expansion of the industry. The Housing Committee of the Twentieth Century Fund's Housing Survey concludes :

The Committee, however, is deeply concerned with the dangers to the economic system and the social structure that come from depending so largely for our housing supply upon the variable and often eccentric demands of the top third of the population and upon an industry designed to accommodate them. This traditional policy has been accompanied by . (a) an exaggerated violence in the house-building curve with serious repercussions throughout the business world ; (b) a rapid obsolescence of dwellings at the top of the scale and an undesirable maintenance of values in the worst of the supply at the bottom ; (c) unnecessarily high costs in the production, distribution and financing of dwellings, and (d) unnecessary expense, inconvenience, and even suffering for a large part of the population.

Not only would the bulk of the public benefit from an ampler production of houses for the middle- and lower-income groups, but an industry devoted to such production could hope for a more sustained

¹ These figures are taken from Nathan STRAUSS, *op. cit.*, pp 107-108.

² See R. U. RATCLIFF : " Filtering Down and the Elimination of Substandard Housing ", in *Journal of Land and Public Utility Economics* (Madison, University of Wisconsin), Nov. 1945, p. 322.

activity than housebuilding has enjoyed and could play a more substantial and more dependable part in the economy as a whole.¹

The building industry provides, in fact, a perfect example of both the need and the opportunity for a union of public and private enterprise : the sort of union that worked so well under war conditions which demonstrated vividly its productive possibilities. Here is no proposition whereby Governments would encroach on a traditional field of private enterprise. What is at issue is the supply of houses to a section of people whose needs private enterprise has never been able to meet. Provided that private enterprise will tender for contracts with profit margins consistent with the small degree of risk involved, there is no reason why local authorities should not take advantage of the potential efficiency of private enterprise by calling for competitive tenders for the supply of materials and for the building of houses in accordance with public plans. In such circumstances, private enterprise will benefit substantially from public housing policy. If Governments employ their own architects and workers, they will still buy materials from private industry. If Governments let contracts for building projects, or provide credit facilities in one form or another, the building industry will have opened to it an enormous reservoir of demand. Two British investigators have come to the following conclusion :

On the whole . . . the local authority houses are better planned, better designed and better built than those by private enterprise . . . It seems to us clear that in connection with housing, private enterprise should be limited to two things . first of all, building houses for the well-to-do, who are able to employ their own architects and build their own houses; and secondly, doing the actual construction of houses for the City Council, who employ architects and other skilled officials in order to design the best houses for those who cannot afford to do it for themselves.²

Investors who have become accustomed to receiving comparatively high returns on housing speculations may oppose such policies. But the high returns they have received have rested essentially on imperfections in the capital market and there is no reason why Governments should be any more tender of these returns than they should be of slum owners' returns,

¹ TWENTIETH CENTURY FUND, *op. cit.*, pp. 311-312.

² E. D. SIMON and J. INMAN : *The Rebuilding of Manchester* (London, Longmans, Green and Co., 1935), pp. 122-123.

or of the returns that could be earned by vendors of impure foods.

The Need for Elasticity in Housing Policy

There are possible dangers attaching to a public housing programme or to any other form of Government enterprise. The aims of such a programme may become too rigid to permit the flexibility that is essential to economic progress. The setting of specific housing targets, determined by administrators, may lead to houses being built in numbers and according to designs which do not conform best to the needs of consumers. The housing programme may set standards so high as to require a diversion of resources to building such as will prevent the attainment of other ends which may be more desired by consumers. Concentrating on the correction of defects in the housing sphere may permit or even encourage the overlooking of equally or more grave defects in other sections of the economy. The programme in operation may cloak inefficiency on the part of building workers and managers, or it may even become a vehicle for exploitation of the community by the building industry in the name of organisation and stability. Opportunities for progress may be lost in order to achieve security.¹

Indeed, if housing standards are sacrificed for objectives such as full employment or a high level of expenditure on construction, we may wind up with worse housing than we would have had without a programme for maintaining activity. Incentives to build poor housing are fairly easy to create, but incentives to build good housing are somewhat more difficult.²

The community can and should develop safeguards against the risks inherent in any public action. The definition of housing needs given earlier establishes consumers' needs as the final criterion. It is against this that housing policy, like other public economic policy, must be measured. Careful investigation and full public discussion will be needed to provide a continuing check on Government policies in action. The existence of certain dangers must not, however, be regarded as

¹ Cf. A. G. B. FISHER : *Economic Progress and Social Security* (London, Macmillan and Co., Ltd., 1944), *passim*.

² Ramsay Wood : "Housing Needs and the Housing Market", in *Housing, Social Security and Public Works* (Washington, Board of Governors of the Federal Reserve System, 1946), p. 13.

an excuse for doing nothing at all. In the field of housing in particular, there is little danger of excessive building as a result of Government action for many years to come — provided that standards and designs are kept flexible so that they may be adjusted to changes in consumers' tastes, and that careful regard is had for developments and changes in the location of industries which require the building of new houses to accommodate increasing populations in particular areas.

Against the possible defects of a public housing policy must be set the certainty that, without such a policy, the housing problem cannot be solved. The real danger is that unless Governments develop housing policies, in most countries on a much greater scale than ever before, housing will simply not be provided. "The important thing for Government is not to do things which individuals are doing already, and to do them a little better or a little worse; but to do those things which at present are not done at all."¹ Only by energetic action in the housing sphere can Governments move towards a solution of the housing problem and, at the same time, provide the basis for a healthy and permanent expansion of the private building industry.

¹ J. M. KEYNES : *The End of Laissez-Faire* (London, Hogarth Press, 1926), pp. 46-47.

CHAPTER II

HOUSING AND EMPLOYMENT POLICY

Housing programmes have figured prominently in discussions of means of achieving full employment, an objective which has been adopted by most countries as a central plank in their social and economic programmes. This chapter begins with an analysis of the action needed to achieve full employment and goes on to an examination of the contribution that housing can make to that objective. The ultimate aim of economic policy is rising living standards for the whole community, which are to be attained by full employment in association with rising productivity, restriction of monopolistic practices, improved allocation of resources and more equitable distribution of income. But "full employment" is the ideal which strikes the imagination, its appeal well-founded in the too long experienced futility of chronic unemployment.

In a centrally planned economy, unemployment would present itself immediately to administrators as an obvious waste of resources which could have been used for the production of goods and services for the use of the community. But in economies where production, consumption and distribution were based on individual decisions, where there was no central economic administration and therefore no body which regarded itself as directly responsible for the community's economic condition, it has been possible for depression and unemployment to appear as in some way a necessary evil, caused by sunspots, by the need of the economy to recuperate or to adjust itself to technological changes, by the refusal of workers to accept lower wages or by some other quite inevitable influence. Once the incomes of individuals and of Governments began to decline as the result of the onset of a depression, everyone, including Governments, would economise in order to achieve financial stability. This reduction in expenditure, and therefore in the

demand for goods and services, would lead naturally to a further increase in unemployment. This deflationary development would continue until it defeated itself through various offsetting reactions — further cuts in expenditure would become increasingly difficult, rising amounts would have to be paid in unemployment relief, plant and machinery replacements would become no longer postponable without permanent damage, and expansion in other countries might stimulate an increase in export receipts.

The policy of deliberately reducing public and private spending at a time when unemployment was rising was criticised with increasing frequency and strength during the depression of the early 'thirties. The advocates of an expansionist policy for overcoming depressions, hitherto dismissed as cranks, received partial confirmation from the advance of economic understanding after the depression. These new economic theories in turn received partial confirmation from the experience of the "pump-priming" policies of the United States, and from the fact that the economies which made the experiment did not go bankrupt as they raised the level of their economic activity under the stimulus of increased Government spending. The war gave a final, worldwide demonstration of the decisive effect on employment of the level of demand, and in particular of the effectiveness of Government spending, at least under wartime conditions, in stimulating employment. It demonstrated moreover that, as long as spending was insufficient to maintain full employment, the expansion of the economy could safely be financed by expansion of credit; and that, when full employment was reached, the continuance of credit expansion would create such a pressure of spending that inflation could be avoided only by Government controls over the economy.

The waste of potentially productive resources has been most obvious in countries where unemployment has arisen as a result of the instability and deficiency of total effective demand; it is no less real in countries where resources are not being used as effectively as possible owing to shortage of capital equipment and of enterprise. These two types of countries have been usefully distinguished as "excess-savings" countries and "capital-scarcity" countries.¹ The economic factors affecting

¹ Cf. INTERNATIONAL LABOUR CONFERENCE, 27th Session, Paris 1945, Report II : *The Maintenance of High Levels of Employment during the Period of Industrial Rehabilitation and Reconversion* (Montreal, 1945), p. 11. An analysis of the economic factors affecting the level of employment will be found in this same Report, particularly in Chapter II.

the level of employment are the same in both types of countries, but the employment policies appropriate to them are likely to be different in emphasis.

It is now widely recognised that unemployment represents an unnecessary waste of potentially productive resources, that it is not an inevitable evil but can be substantially mitigated by appropriate Government policies, and that there are so many useful goods and services which the community urgently needs that resources of production should never again be permitted to be wasted in idleness. This new attitude of public opinion has led to several important public pronouncements on employment policy, in which the various influences on employment are analysed and various methods are proposed for achieving and maintaining higher and more stable levels of employment.¹ In order to discuss the contribution that may be made by housing policy to employment policy, it is necessary to set out in a convenient form the main features of these discussions. The definition of full employment given in the first chapter of the present report — that anyone willing to work for current rewards should be able to find work within a reasonably short time — stands as an employment target acceptable to all countries. It should be noted that this definition assumes implicitly that a collective decision has been made as to the desirable balance of work and leisure, that is, concerning hours of work and holidays.

Employment and Demand

Employment is determined by the level and composition of total effective demand. In order to understand the various factors that influence the level of employment, it is necessary to distinguish the significant subdivisions of total demand. The most useful classification of demand for this purpose is along the following lines :

Private consumption : Purchases of home-produced consumer goods and services by private individuals.

¹ See, for example, *Employment Policy* (London, His Majesty's Stationery Office, 1944, Cmd. 6527); *Employment and Income* (Ottawa, Government Printer, 1945), *Full Employment in Australia* (Canberra, Commonwealth Government Printer, 1945); and the *United States Employment Act, 1946*.

Public consumption: Purchases of home-produced final current goods and services (particularly the services of public servants) by public authorities.

Private investment: Purchases of home-produced capital goods by private individuals or firms.

Public investment: Purchases of home-produced capital goods by public authorities.

Exports: Purchases of goods and services by buyers in other countries.

The significance of this classification emerges from an examination of the factors which determine the level of demand in each category. Spending on private consumption is to a large extent determined by the level of income itself. Normally, people spend the greater part of their incomes on consumption goods, and the proportion they so spend bears a fairly close relationship to the size of their income. This relation has been acknowledged in the widely accepted concept of "propensity to consume". If people always spent any extra income on consumption, there would be no economic problem in maintaining employment.¹ People could live, fully employed, "taking in each other's washing". Incomes arising from full employment would be wholly spent in demanding goods and services, the production of which would require the full employment of resources and the sale of which would permit the payment of incomes corresponding to full employment. The employment problem would be simply one of organisation and enterprise, to get resources into those industries on whose products the incomes of the fully-employed community would be spent. It is this problem of organisation of resources which a competitive system of free enterprise, working through a free price system, is well adapted to meet.

But not all extra income is always spent by its recipients on domestically produced goods and services. Some of it is paid to Governments in taxes, some of it is spent on imported goods, creating a demand for labour in other countries, and some

¹ The influence of firms and of corporate savings is ignored in this argument.

of it is saved.¹ For convenience, and having in mind only the country immediately concerned, these parts of income are here termed "unspent income".

Unspent income is significantly different from income spent on private consumption in that it does not, of itself, create a demand for goods and services whose production and sale will give rise to employment and income. It is not self-perpetuating in the way that incomes spent on consumption are. Full employment can be maintained only if the unspent income is completely offset by the demand for goods and services other than for private consumption — that is, by public spending (on consumption and investment), by private investment and by the demand for exports. Unfortunately, however, there is in the private-capital economy no force which will ensure that these avenues of demand will be permanently maintained at just that level which will absorb all the resources not required to meet the consumption demand of the fully employed community. The employment problem arises from the fact that, in the absence of a deliberate plan, the availability of resources and therefore of finance exerts at best an inadequate pressure towards ensuring that the resources will be used. The extent to which these resources will be used depends on other considerations.

The volume of Government spending is determined by social policy and costs of administration. These depend in turn on various influences and pressures such as the popular demand for health and medical services, for libraries and roads, the size of the population and its geographical distribution. Public spending has not, at least in the past, been determined by the wish to carry expenditure to the limit set by available resources and by the finance that would be available for taxes and borrowing if the economy were fully employed.

Private investment is determined by entrepreneurs' expectations of the future returns which could be earned on investment undertaken now, balanced against the cost to them of the investment. These decisions are the result of many influences, such as the expected level of future spending, other business

¹ Saved income may be held in various ways — as money, bank deposits, Government securities, industrial or agricultural investments, and so on. It should be noted that a decision to "invest" in, for instance, Government securities or industrial shares, does not represent a demand for goods and services. Net investment in this sense can take place only if somebody — a Government or an industrialist — decides to demand goods and services and to pay for them out of his own savings or by borrowing money from people willing to lend.

men's reactions to the future, technological changes, the rate of interest, the political colour of Governments. They are not influenced by a wish to carry investment to the limit set by the resources and the finance that would be available if the economy were fully employed.

Finally, exports depend on the demand from abroad for a country's products. This demand depends on the level of incomes abroad, on relative price levels, on the propensity of overseas countries to import, and on the obstacles placed in the way of international trade. The demand will not be expanded simply because resources are available in any particular country to produce and therefore to finance exports.

For all these possible outlets for unspent income the availability of resources and of finance can set an upper limit to production, but it does not provide an adequate motive to expansion, and it does not generate any effective tendency to make full use of the resources. If Governments, business men and overseas buyers, out of the complex of factors which determine their expenditures, do not in fact spend enough to absorb all the resources not required to satisfy the private consumption demand of a fully employed economy, the economy cannot reach and maintain a state of full employment. The actual level of employment, moreover, will fall short of the desired level not only to the extent of the shortage of demand available for offsetting unspent income: the lower level of activity will require a lower level of private investment than would be required at the desired level of employment; the lower level of incomes will support a lower level of private consumption than at the desired level of incomes; and public opinion may insist on a lower level of Government spending than would be supported at the desired level of total spending. Employment will fall until incomes have fallen so low that the amount which is unspent is no more than can be offset by actual current investment, exports and Government spending.

In "excess-savings" countries, rising standards of living are held back by the fact that resources available are not fully employed. Investment opportunities are lacking, buyers abroad do not wish or are not able to increase their purchases, Governments do not increase their purchases, so incomes are less than they could be at full employment and people are unable to spend as much on consumption goods as they would if fully employed. In "capital-scarcity" countries, on the other hand, rising living standards are held back by the shortage of enterprise and the lack of capital equipment necessary for investment.

At the same time, productivity is so low that available resources are more or less fully taken up simply in producing enough goods and services to keep people alive. The resources that would be needed to produce capital equipment and so to raise productivity cannot be spared, with current methods of production, from production of consumption goods because of the low level of productivity. In both types of countries, standards of living are still further held back by the fact that monopoly and maldistribution of income lead to an allocation of resources that is not best calculated to meet the desires of the people.

But a tendency towards continuing under employment is not the only employment trouble that besets "excess-savings" countries. What has been more serious in the past is the extreme variability of the various demands for goods and services. Business men's expectations about the future are highly sensitive and inherently subject not only to violent but also to simultaneous fluctuations. Government spending has also varied substantially and has, moreover, tended to be reduced, in response to popular pressure, at the same time as other types of demand, and therefore employment and incomes, were declining. Demand from abroad for exports has also been extremely variable. Fluctuations in these sections of demand have caused fluctuations in employment and therefore in incomes, which have caused further fluctuations in spending on consumption goods, in private investment and in Government spending.

The Scope for Action by Governments

If Governments are now to accept responsibility for maintaining full employment, their task can be set out most clearly in the following way. Out of incomes corresponding to full employment, a proportion, which can incidentally be measured with some certainty at least over short periods, will be spent on consumption goods and will therefore itself give rise to the employment necessary to maintain that proportion of income. The balance of the income will be either saved, paid in taxes or spent on imports. The problem of Government policy is then to ensure that this section of income which is not exerting a direct demand for home-produced goods and services is fully offset by the Government's own spending, by private investment and by exports, which do exert a demand for goods and services and which must therefore be maintained in order to maintain

full employment. It is necessary to examine the possible scope in various directions for Government full employment policy.

PRIVATE INVESTMENT

A Government may seek to increase private investment — for instance, by taxation designed to provide an incentive to investment, by promotion of a reduction of interest rates, by adoption of policies designed to foster the confidence of business men, or by encouragement of research into new methods and types of production. Government policy along these lines may contribute significantly to the stabilisation of private investment and so reduce to manageable proportions the problem of fluctuations in private investment and consequent multiplied fluctuations in total employment. Indeed, one of the main grounds for optimism about the possibilities of success in maintaining full employment is that a continuing level of high and stable demand should itself encourage business men's expectations that this state will continue, and should therefore itself tend to dampen down the fluctuations in investment that have been such a prolific source of fluctuations in the past. The Australian White Paper on Full Employment says :

The Commonwealth Government believes that the greatest single contribution to the stability of private capital expenditure will be the assurance that total spending will be maintained at high and stable levels . .

A major cause of decreases of private capital expenditure in the past has been the tendency of many business men, farmers and other investors simultaneously to contract their capital expenditure because of the fear of a reduction in spending. This was inevitable in an economy in which total expenditure was expected to fluctuate, and in which business men were extremely sensitive to their rivals' and associates' estimates of movements in spending in the near future. Simply because business men tended simultaneously to contract their capital expenditure, they contributed significantly by their very actions to the fall in total spending which they feared.¹

There is, however, a definite limit beyond which it is not desirable to stimulate investment. Once the rate of investment is adequate to maximise the productivity of the available labour force, any further investment merely creates over-capacity and

¹ *Full Employment in Australia, op. cit.*, p. 7.

represents a waste of resources which could have been better used to produce other more urgently needed goods and services, or to permit a greater degree of leisure for the community. If a Government relies heavily on stimulation of private investment for the success of its employment policy, it is likely to reach fairly quickly the stage where it is merely encouraging the creation of excess capacity or, alternatively, where it is encouraging investment now which would otherwise have been undertaken later, thereby aggravating the employment problem in the future. Its best policy will be to seek to establish what is the long-run rate of investment which can most usefully be maintained, and to concentrate on minimising short-run fluctuations around that level so as to confine them within a range which can be conveniently offset by other aspects of its economic policy.

EXPORTS

A Government may seek to stimulate exports. The most hopeful method of achieving this is for all Governments to undertake to maintain high and stable levels of employment within their own borders, so as to ensure a high level of demand which will appear in part as a demand for imports. This policy needs to be supplemented by agreements to reduce trade barriers, although it should be noted that such agreements are of limited value by themselves for the purpose of promoting full employment, as they tend to increase imports as well as exports.¹ Other devices for promoting exports are also of limited value. Other countries will buy imports only if they can get supplies of an acceptable currency. The obvious method of supplying such a currency is for the country, which wishes to export, to import more goods itself, but this will of course offset the employment-stimulating effect of exports. The alternative is to lend abroad in order that other countries may be able to buy the products of excess-saving countries.² But beyond a

¹ See, however, W. F. STOLPER : "The Volume of Foreign Trade and the Level of Income", in *Quarterly Journal of Economics*, Feb. 1947, p. 299, where it is established that a balanced increase in foreign trade can lead to an increase in employment.

² Foreign loans, it should be noted, while promoting the level of domestic employment, transfer the products of that employment to other countries, in exchange for a promise of later repayment with interest. Foreign lending as a part of employment policy is therefore justified only to the extent that the lending community regards this type of investment as more important or more profitable than an immediate raising of its own living standards, or than an immediate reduction of its working hours.

certain point, other countries will be unwilling or unable to undertake the burden of repaying foreign loans. Moreover, the later repayment of the loans can be effected only if the original lending country accepts an adequate import surplus. This will itself aggravate that country's employment problem, which will have to be solved by further extension of the solutions suggested here, such as expansion of investment, redistribution of incomes and reduction of working hours.

GOVERNMENT EXPENDITURE

A Government may increase its own spending. This may be in any of several directions : (a) improved social services such as schools, libraries, health and medical services ; (b) increased public investment in roads, parks, bridges, harbours, irrigation projects and so on¹ ; (c) Government activity to produce consumer goods and services which the community needs, and which are not being produced in sufficient quantities by private enterprise either because of monopolistic restriction of output, because of external economies not taken into account in the profit calculations of private business men, or simply because of lack of enterprise ; or (d) expenditure designed to redistribute income from where it is not being spent to where it is more likely to be spent. Transfers from higher income to lower income groups, by means of old-age pensions, family allowances, and so on, will have this last-mentioned effect. Direct spending to redistribute income may be supplemented by other policies designed to alter the distribution of incomes in such a way as to increase private spending on consumption — for instance, the Government may encourage wage increases in the hope that the redistributive effects thereof will not be wholly offset by rises in prices ; or it may take action to eliminate or reduce monopolistic profits.

Spending by Governments must be financed, and they need to choose such methods of financing as will supplement their economic policy. Taxes are likely to come at least in part from money that would otherwise have been spent on consumption goods. Some taxes are more likely than others to discourage spending ; some have a discouraging effect on enterprise and the incentive to invest. Borrowing from the

¹ On the role of public investment in full employment policy, see INTERNATIONAL LABOUR OFFICE : *Public Investment and Full Employment*, Studies and Reports, New Series No. 3 (Montreal, 1946).

public may also come in part from money that would otherwise have been spent ; but this will be much less likely than in the case of taxes. Borrowing carries with it, however, the need to pay annual interest charges, transfers which may themselves have upsetting effects on the stability of production and expenditure. Borrowing from the central bank avoids these transfer problems, but if carried too far may have inflationary effects which may again upset the stability of production and expenditure. Governments are thus faced with the necessity of determining their financial policies in the light of the advantages and disadvantages of the various methods of raising money.

The various avenues of Government spending listed above may offer greater scope for sustained expansion than do increased private investment or increased exports, which have been shown not to be capable of substantial extension. Public works to improve the capital equipment of a nation, higher standards of social services, Government enterprises and redistribution of income, all offer substantial opportunities for increased expenditure that will raise the community's standard of living.

A Government seeking to maintain full employment and rising living standards has to make in this connection a number of vital decisions, which fall into four main classes. It will in the first place have to weigh present against future satisfactions — it will have to decide whether the community really wants extra consumption now, or extra capital equipment which will produce extra consumption goods for it later. Secondly, it will have to weigh against each other the needs, demands and merits of various sections of the community — whether mothers, invalids, widows, *rentiers*, the aged, wage earners, farmers, or some other section is most deserving of increased incomes. Thirdly, it will have to balance the advantages of foreign lending against the advantages of raising domestic standards of living. Finally, it will need to weigh the needs of its own and other communities for extra goods and services against the desire of the members of its community for extra leisure — this is a decision which many individuals cannot take by themselves but which must be taken through collective bargaining and social legislation. The Government may decide, for instance, if it considers that the real wish of the community is for extra leisure rather than extra goods and services, that it should give its support to a movement for shorter working hours and longer holidays.

In "capital-scarcity" countries Governments will have to take these decisions against a different economic background.

Their main aim is likely to be to secure the release of resources for production of capital equipment, to encourage the enterprise necessary to guide this capital formation, and to arrange the finance required to carry producers over their developmental period. They will tend therefore to put greater weight on future consumption than present consumption, they will oppose the introduction of social services which would absorb resources which they believe could be more advantageously used in increasing other types of production, they will not encourage exports beyond what is necessary to finance essential imports and will seek to canalise available overseas spending power into the purchase of the most essential imports, and they will not press for any stricter limitation of working hours than is essential to human welfare.

ALTERNATIVE EMPLOYMENT POLICIES

The significance of these problems when developing a policy designed to raise standards of living, including an improvement in the standard of housing, to be secured by full employment and an allocation of resources that conforms better with the wishes and needs of the community, emerges clearly in any consideration of the various policies proposed for adoption by Governments in pursuing these ends.

On the one hand, there is the group which advocates that Governments should play an essentially passive role in employment policy. They should as much as possible leave the economy completely alone, intervening only when and only to the extent that private enterprise fails to secure full employment (and perhaps also when and to the extent that it fails to avoid monopolistic abuses). The underlying assumption is that the community's needs will always be best ascertained and best served by private enterprise operating in a competitive market. If Governments do have to intervene, they should confine themselves exclusively to anti-trust action and to public works which do not encroach on any field of activity in which private enterprise, now or in the future, might be interested. Any such encroachment, according to this group, would defeat its own end as it would immediately discourage private enterprise's confidence, and therefore render the unemployment problem worse. Redistribution of income should be confined at the most to payment of conservative amounts in unemployment relief — the rates should not be too high or they would discourage workers from seeking or remaining in employment. This group would

oppose, as socialistic, inflationary or discouraging to private incentive, any increase of redistributive social services. It would be less opposed to overseas lending to stimulate exports and it would be positively favourable to amendments of tax schedules to encourage saving and investment. This group would also disapprove of aiming at full employment in the sense of maintaining "such a pressure of demand on resources that for the economy as a whole there will be a tendency towards a shortage of men, instead of a shortage of jobs"¹, on the grounds that this would disintegrate industrial discipline, encourage an inflation of wage incomes, and remove the vitally important element of flexibility from the economy. This group is clearly more concerned with the preservation of private enterprise than with using fully all the available resources of an economy to produce the goods and services most needed by the people.

At the other extreme are those who despair of stabilising private expenditure in general and private investment in particular. They would insist that the policy of merely offsetting fluctuations in private expenditure and exports by compensating fluctuations in the opposite direction in public expenditure was doomed to failure because such a policy could not be administered successfully. Governments would never be able to have their plans so fully perfected as to be able to step in immediately to take up unemployed resources. Even if they succeeded partially, they could do so only by determining their expenditure according to what could be quickly produced rather than what was most needed by the community. Moreover, this group would argue that if Governments are to avoid expenditure which might directly or indirectly discourage private enterprise, they will not have a wide enough field left in which to increase their expenditure sufficiently to achieve full employment. This group would also argue that the mainspring of a private enterprise economy must be competition, and that in modern economies competition has been so regulated and controlled by agreements between producers that private enterprise is no longer capable of securing a socially useful structure of production. In its most extreme form, this group would advocate complete socialisation of production. In its less extreme form, it would advocate rather a gradual movement towards this position, by means of a steadily expanding level

¹ *Full Employment in Australia*, op. cit., p. 6. See also Sir William BEVERIDGE : *Full Employment in a Free Society* (London, George Allen & Unwin Ltd., 1944), p. 18.

of Government spending of all types which would reduce, and therefore make less significant and less troublesome, the fluctuations in the field of activity whose level is determined by private investment decisions. This group would insist that private enterprise has completely and irremediably ceased to serve the real interests of the community, and should sooner or later be replaced by Government management.

Most thinkers and writers on these problems are to be found somewhere between these two extremes. They set the demands and wishes of the community as the determining factors of economic behaviour, and believe that any form of management, whether public or private, should be judged by its success in satisfying these demands. They believe that a permanent, or at any rate a long-term, solution can be based on a combination of private and public enterprise, in which each would find its own sphere. This would need to be backed up by the readiness of Governments to step in to offset fluctuations in total expenditure, however they may arise. They do not believe, however, that this would be administratively impossible, as the fluctuations would be less serious, and they would leave Governments free to intervene in any field in which intervention could be most effective in promoting higher employment and living standards. They fear the danger of instability and of monopoly that would arise if the first group's policies were adopted. They fear a possible threat to political liberty and to individual freedom and initiative, and they foresee the danger of an excessively rigid structure of production, if the second group's policies were adopted. The aim of this group is perhaps best described as the socialisation of demand, leaving the question of socialisation of particular types of production to be decided on the merits of each individual case.¹

There are also to be found similar differences of opinion as to how far Governments should go, and what methods they should adopt, in policies designed to restrict monopoly and correct a maldistribution of incomes in order to secure an allocation of resources that will better serve the community's needs.

Fluctuations in Housing and Employment

The foregoing analysis of the determinants of the level of employment shows the crucial importance of investment in

¹ Cf Sir William BEVERIDGE, *op. cit.*, pp. 190-193 and *passim*. See also A. C. PIGOU : *Socialism and Capitalism* (London, Macmillan and Co. Ltd., 1937).

offsetting "unspent income" and thereby keeping up the level of employment. In the total level of investment, residential construction is one of the most important single items. In the United States, for example, total residential construction between 1919 and 1940 accounted for over 18 per cent. of gross capital formation.¹

When allowance is made for the repercussions on employment in the consumption goods industries of the spending of incomes derived from housing activity, it will be realised that housing has a large effect in determining the total level of employment. It is unfortunate, therefore, that the fluctuations in the level of housing activity have been so great, probably greater than the fluctuations in any other important industry. Table IV shows variations in residential construction in the United States between 1919 and 1940.

TABLE IV. RESIDENTIAL NON-FARM CONSTRUCTION
IN THE UNITED STATES, 1919-1940²

(In thousand millions of dollars at prices then current)

Year	Residential non-farm construction	Year	Residential non-farm construction
1919	1.9	1930	1.9
1920	1.8	1931	1.6
1921	1.9	1932	0.7
1922	3.0	1933	0.5
1923	3.9	1934	0.7
1924	4.5	1935	1.0
1925	4.8	1936	1.5
1926	4.8	1937	1.8
1927	4.5	1938	1.9
1928	4.1	1939	2.5
1929	3.7	1940	2.8

The value of residential construction was at its peak in 1925 and 1926. It declined fairly slowly to 1929 and then rapidly until 1933, when it was just over one tenth of its 1925 level. Thereafter it slowly recovered but, in 1940, was still

¹ S. KUZNETS. *National Product Since 1869* (New York, National Bureau of Economic Research, 1946), pp 40 and 50.

² *Ibid*, p. 40.

only 58 per cent. of its 1925 peak. The number of new non-farm residential units built shows similar fluctuations. From a peak of 937,000 units in 1925, output declined to 93,000 units in 1933, and, by 1940, had risen again to 603,000 units.¹

Fluctuations as great as this are recorded in no other industry of significance. Of 99 industrial series studied in the United States, building activity, as measured by building permits issued, showed fluctuations at least twice as wide as those of 70 other series, and at least three times as wide as those of 40 other series.² Estimates made by Kuznets reveal the differences in the extent of fluctuations in activity (table V).

TABLE V. FLUCTUATIONS IN VARIOUS ECONOMIC SERIES
FOR THE UNITED STATES³

	High	Low	Low as per cent of high
Consumers' outlay	\$ thousand million 76.7 ¹	\$ thousand million 45.9 ⁴	per cent. 60
Gross capital forma- tion	20.7 ¹	3.3 ³	16
Total construction .	10.9 ²	2.4 ³	22
Residential construc- tion .	4.8 ²	0.5 ⁴	10

¹ 1929 — * 1926 — * 1932. — * 1933

Similar figures are difficult to obtain for other countries, but what evidence is available confirms this experience of the United States. It is indeed of the very nature of housing activity that, left unregulated, it should be subject to extremely wide fluctuations.⁴

The Need for Stability of Housing Activity

Important as housing activity is, not only in determining the level of housing standards that can be achieved but also in determining the general level of employment, incomes and welfare, it is clear from these figures that it has failed badly

¹ TWENTIETH CENTURY FUND, *op. cit.*, p. 364.

² INTERNATIONAL LABOUR OFFICE : *Housing Policy* (Montreal, 1945), p. 20.

³ S. KUZNETS : *op. cit.*, pp. 40 and 50.

⁴ See Chapter V below.

in its contribution to both these ends. Housing standards remain extremely low, resources in the building industry which could have been used to improve those standards have been left idle, and wide fluctuations in building employment have contributed greatly to the instability of employment in the economy generally. If the level of housing activity can be raised and if fluctuations therein can be substantially reduced, housing standards will improve more rapidly and a vital section of total employment, important not only in its own right but also for its repercussions on other employment, will be made more stable. The problem of maintaining stability of employment generally will be correspondingly simplified.

At first sight, increasing the level of housing activity does not appear difficult. While there are clear limitations on the extent to which many lines of expenditure can be expanded, it would appear that housing expenditure can be expanded almost indefinitely. There is no real prospect of existing shortages of housing being overtaken for many years to come, quite apart from the houses needed for newly formed families and to replace old houses that have been demolished. Moreover, even when eventually enough housing has been provided for everyone, continual improvements in the standard of housing will be desired by most consumers.

It is impossible to find any other significant field of investment in which there are such unlimited and such useful opportunities for expansion. It is, moreover, a field which offers scope for harmonious collaboration between private and public enterprise. Each has its own appropriate sphere of action and, moreover, any action by the Government can hardly do otherwise than greatly enlarge the opportunities for private enterprise. After the transition period few Governments would want to interfere in the supply of houses to upper income groups which have long been well served by private enterprise. The same will be true of such sections of middle income groups as can already afford their own housing. Any action by Governments to raise the effective demand of other groups for housing is not likely to restrict the operation of private enterprise and will almost certainly, in most cases, provide an opportunity for private enterprise to meet a demand which it has never before effectively fulfilled.

The problem is whether this large potential demand for houses can be converted into a high and stable annual flow of effective demand which can be met by a high and stable output of houses. The difficulty is that decisions to produce goods

and services which give rise to employment depend not on the need of the community but on what employers expect will be the effective demand for their product when its production has been completed. If employers fear that there will be a decline in demand and consequently reduce their output, their very action, by causing unemployment, gives rise to such a decline. A reduced output of houses will therefore appear, not as a failure to meet the need of families for houses, but as an inevitable and wise adjustment to a contraction in the demand for houses.

There are certain important characteristics of the building industry which unfortunately render it subject to extremely wide fluctuations. These are discussed at length in Chapter V but two, in particular, should be mentioned here. In the first place, houses are extremely durable, so that annual additions to the stock of houses are small in relation to the total supply. Relatively small variations in the total demand for houses can therefore give rise to extravagantly large variations in the demand for additional houses. Secondly, owing to the highly standardised nature of the service provided by houses, the house-building industry is peculiarly suited to the activity of the speculative builder. Fluctuations which tend already to be great because of the first factor will be still more exaggerated by this second factor.

If, on the other hand, the output of housing can be made more stable, it will contribute significantly to stability of employment generally. Stability of the general level of employment and income will go far towards stabilising the level of demand for housing, which will in turn make easier the maintenance of a stable output of housing.

A further question must be considered. On account, for instance, of innovations requiring capital investment, or of fluctuations in purchases of exports by buyers in other countries, there will continually be a need in employment policy to offset fluctuations in certain types of expenditure so as to keep total expenditure stable. Is it possible not only to reduce fluctuations in the output of houses but also to use the housing industry as a field for action to offset fluctuations in other fields of activity? Again at first sight, this does appear possible. There will be a continual need for more housing, spread widely all over the country. The units are relatively small and quickly completed, and require the use of largely domestic materials and of a wide variety of labour skills. However, the proposal contains certain difficulties, which are discussed later

The Construction Industries as Employers of Labour

Despite widely quoted figures of the impressive amount of on-site and off-site employment arising from the housing and construction industries, it appears that, at least in the United States, expenditure on construction gives rise to less direct and indirect employment than would similar expenditures on the products of many other industries. The figures in table VI show direct and indirect employment resulting, in 1939, from the expenditure of one million dollars on various groups of goods and services. "Direct employment" describes the employment arising in the particular industry whose products are purchases. "Indirect employment" describes the employment arising in all other industries such as those producing materials and transport, purchases of which by the original industry would be increased as a result of the expenditure. Figures are available only for the construction industry as a whole, of which residential non-farm construction accounted for about 42 per cent. in 1939.

TABLE VI. DIRECT AND INDIRECT EMPLOYMENT ARISING FROM A UNIT OF FINAL DEMAND FOR THE OUTPUTS OF VARIOUS BRANCHES OF PRODUCTION IN THE UNITED STATES, 1939

(*In terms of number of persons employed per one million dollars' worth of final demand for the output of the respective industries*)¹

Nature of Employment	Final demand of one million dollars' worth of						
	Agriculture and foods	Minerals	Metal fabricating	Fuel and power	Textiles and leather	Railroad transportation	Construction
Direct	724	160	246	178	356	243	174
Indirect	415	406	260	340	414	246	274
Total	1,139	566	506	518	770	489	448

¹ W. LEONTIEF, "Output, Employment, Consumption and Investment", in *Quarterly Journal of Economics*, Feb 1944, p. 312. The International Labour Office is indebted to Mr. Leontief for computing separately the figures for construction industries used in this table. Mr. Leontief is not, of course, responsible for the conclusions drawn from the figures.

The chief industries in which employment arose as a result of the expenditure of one million dollars on construction in the United States in 1939 were agriculture and fishing (33 men), trade (34), lumber, paper, printing and publishing (31), metal fabricating (27), stone, clay and glass products (27), transportation (18), ferrous metals (15), fuel and power (9), chemicals (7), business and consumer services (7), motor vehicles, industrial and heating equipment (6), non-ferrous metals and products (6), textiles and leather (3), food processing (1), rubber (1), all other manufacturing and unallocated (49).

It should perhaps be pointed out that, for the purpose of this table, total final consumer demand has been assumed to be constant — that is, the possible multiplier effect on employment through increased consumption by the additionally employed workers is entirely disregarded.

One million dollars spent on construction in the United States in 1939 gave rise, therefore, to employment of 448 men, in contrast with figures ranging from 1,139 men for the same amount spent on agricultural products to 489 men for that amount spent on railroad transportation. Since housing accounted for nearly half of total construction, figures for housing alone could not be substantially different. This relatively small employment resulting from expenditure on housing is presumably in part a reflection of those characteristics of the organisation and methods of the housing industry which, as noted below in Chapter III, have led to a high level of costs.

Although there are again no comparable figures, there is no reason to assume that the effect on employment of expenditure on construction would be substantially different in other countries. The figures should not be interpreted to mean that expenditure on housing offers the least satisfactory means of expanding employment. They do, however, suggest that it is a costly means, measured in terms of the resulting numbers of men employed; and they suggest also that the housing activity which is needed to raise housing standards is going to cost a large amount of money and is going to absorb a large number of workers. Resolute action will be needed to increase efficiency and reduce unit costs in the building industry in order that the best possible return may be got for the money spent.

The Place of Housing in Employment Programmes

In general, it may presumably be expected that housing will have a relatively greater part to play in employment policy in highly industrialised economies than in less developed economies. In the latter, housing development is likely to be somewhat slower as these communities will probably prefer to concentrate their scarce resources on capital equipment which will directly increase productivity, and on consumption goods necessary to people's health, confining the resources allotted to housing to the minimum needed to maintain the community's health and efficiency.

More highly developed economies, on the other hand, will have a greater accumulation of capital equipment, particularly once the formidable task of restoring war damage has been completed. These communities will be able to allocate a substantial proportion of resources to the improvement of housing and will, in many cases, need to do so as a contribution

to the offsetting of "unspent income". The Canadian Government, for instance, says :

In the field of housing, expenditures have been deficient over the past fifteen years, and there is need, as soon as the exigencies of war permit, for investment in housing on a scale far exceeding the immediate pre-war levels. War savings and post-war credits, the greater assurance of steady employment, family allowances and the facilities of the National Housing Act will enable many thousands to build their own homes.¹

The Australian Government has made a similar statement :

Private capital expenditure will continue to be one of the most significant parts of total expenditure. Its extreme variability, and the impossibility of completely stabilizing the factors which bring about that variability, present a most important and difficult problem.

Special plans will create new opportunities for private capital expenditure. For example, the Commonwealth and State Governments are agreed on plans for a substantial expansion of house-building activity as soon as the war permits. Building is an important element of private capital expenditure and industries associated with it should be on a firm basis for expansion for many years to come.²

The potential importance of housing to the general level of activity has been widely discussed in relation to post-war economic conditions in the United States. For instance, a study made by three members of the Bureau of Labor Statistics examines possible full employment patterns for the United States economy in 1950.³ It is estimated that, deducting a probable 1.5 million for the armed forces and allowing 2 million for "minimum frictional" unemployment, full employment in 1950 will require about 59 million civilian jobs. Taking into account sections of the economy such as agriculture and self-employment, where employment is largely independent of production, there will be 39.1 million men whose jobs will depend on the level of production. The study then examines what employment would be given as a result of purchases by buyers from abroad and by consumers, investors and Governments

¹ *Employment and Income*, *op. cit.*, p. 12.

² *Full Employment in Australia*, *op. cit.*, p. 7.

³ J. CORNFIELD, W. D. EVANS and M. HOFFENBERG: "Full Employment Patterns, 1950", in *Monthly Labor Review* (Bureau of Labor Statistics), Feb. and Mar. 1947.

at home, in the absence of any deliberate policy to achieve the level of spending necessary to maintain full employment. The study concludes that employment would be given to only 34.4 million men. This deficiency of 4.7 million in the number of jobs available, as the result of domestic expenditure and exports, would involve much greater final unemployment as a result of the repercussions of the inability of these 4.7 million men to spend on consumption, and therefore to give rise to employment.

In order to achieve and maintain full employment in 1950, it would be necessary to increase spending and exports so as to provide jobs for these 4.7 million men. The study shows how various lines of expenditure would have to be increased in order to achieve this result, on two alternative assumptions — first, that only consumption was increased, and second, that only investment and exports were increased.

Tentative figures for housing prospects may be deduced from this study. It is estimated that, in the absence of deliberate employment policy, demand for residential non-farm construction in 1950, as a result of the domestic spending of incomes resulting from full employment, would be 74 per cent. higher in volume than in 1939.¹

In 1939, residential non-farm construction in the United States produced 515,000 residential units. In 1950, according to this study, there would therefore be a demand for nearly 900,000 housing units², a figure little smaller than the 937,000 units actually built in the peak year, 1925. In other words, in the absence of a full employment policy, demand for housing in 1950, assuming that full employment has been *achieved*, would be practically equal to the highest volume of residential construction ever achieved in the United States, and yet the economy as a whole would still not be able to *maintain* full employment and would, indeed, fall seriously short of that aim.

In its estimates of the action required to maintain full employment by an expansion of investment alone, the study allows for an increase in all construction by two thirds. If this increase were applied to housing, an output of 1,500,000 units would be required to permit housing to play its full part in the employment policy. If, on the other hand, full employment were maintained solely by an increase of consumption, an

¹ *Monthly Labor Review*, Feb. 1947, p. 184.

² See also U.S. DEPARTMENT OF LABOR *Probable Volume of Postwar Construction*, Bulletin No. 825 (Washington, Government Printing Office, 1945), p. 20.

output of 900,000 units would still be required. Full employment in 1950 would require, therefore, according to the assumptions of this study, the building of between 900,000 and 1,500,000 residential units. Since any full employment policy actually adopted would almost certainly place considerable emphasis on housing, a figure near the upper limit of this range may be taken as reasonable.

Almost all estimates of annual post-war housing requirements in the United States, whether approached from the point of view of social welfare or of full employment, produce figures somewhere between a million and a million and a half.¹ The National Housing Agency, for instance, estimated in 1944 that, on the basis of capacity to pay, of full employment requirements and of the elimination in ten years of half the substandard housing then existing, there would be a need for 12,600,000 housing units over a ten-year period.²

It is important to note, however, that the Bureau of Labor Statistics study concludes that, given full employment in 1950, there will be effective demand for only 900,000 housing units. If more houses are to be built to meet the needs both of improving social welfare and of maintaining full employment, Government action will be required certainly to increase the purchasing power of consumers for houses and, probably, to stimulate increased production of houses.

In all countries seeking both full employment and an improvement in social welfare, housing is coming to be regarded as the most important single field for public action. It is necessary, therefore, to understand the conditions under which a high and more stable level of activity can be maintained in the housing industry, and under which the resultant output of the industry can be purchased by consumers. The balance of this report examines these problems at length.

¹ "The estimates, whether based on social or economic needs, arrive at remarkably similar conclusions." Catherine BAUER "Housing in the United States", in *International Labour Review*, July 1945, p. 1.

² U.S. NATIONAL HOUSING AGENCY: *Housing Needs* (Washington, U.S. Government Printing Office, 1944), p. 6

CHAPTER III

THE SUPPLY OF HOUSES : THE COSTS OF BUILDING ACTIVITY

The supply of houses depends on the number of existing houses, the conditions under which those houses can be repaired or altered, and the conditions under which new houses can be built. The number and state of repair of existing houses is given. The conditions under which building activity is carried on must now be examined.

Costs of a Typical House

The "costs of a house" may mean many different things — the cost of actual construction, the cost of the house and the land on which it stands, the annual cost to the occupier, and so on. The analysis given in table VII of various types of costs arising in connection with a typical house provides a useful basis for detailed discussion of separate items and the response of each to changes in the amounts demanded.¹ The example given is a house the selling price of which is \$4,800, the purchase being financed by a \$4,300 mortgage at 5 per cent with repayment in 25 years. (This is the basis on which Federal Housing Administration housing loans are made in the United States.)

TABLE VII. ANALYSIS OF COSTS OF HOUSE AND LOT SELLING
FOR \$4,800 IN 1939

(In U.S. dollars)

<i>Land:</i>	<i>Selling Price</i>	\$
Cost		350
Profit		350
		<hr/> 700

¹ The data used in this illustration are drawn from Peter STONE, "Some Economic Aspects of Housing", in Monograph No. 8 · *Toward More Housing*, printed for the use of the Temporary National Economic Committee (Washington, U.S. Government Printing Office, 1940), pp. 41 *et seq.*

House:

	\$
Materials and labour	3,525
Architect's fee	50
Advertising expenses	175
Profit and overhead	350
	<hr/>
	4,100
Total price.	4,800

*Cost to Purchaser**Immediate Cost:*

Down payment	500
Conveyancing, etc.	175
	<hr/>
	675

Monthly Cost:

Interest and amortisation :	
on mortgage	25.15
on mortgage insurance	0.88
loss of interest on immediate cost	2.81
Taxes and insurance	4.75
Heat, maintenance and repairs	8.40
	<hr/>
	41.99

Composition of Total Cost to Purchaser

	\$	Per cent
Construction cost (labour, materials and architect's fee)	3,575	72
Land cost	350	7
Profit on house and land	700	14
Advertising and purchasing expenses	350	7
	<hr/>	
	4,975	100

Composition of Monthly Cost to Purchaser

	\$	Per cent
Interest and amortisation	28.84	69
Taxes and insurance	4.75	11
Heat, maintenance and repairs	8.40	20
	<hr/>	
	41.99	100

Factors Affecting the Level of Costs of Building Activity¹**LAND**

Land falls into three categories. It may be raw or virgin land; it may be "improved" in the sense of having available roads and pavements, water and fire protection services, public utility and sewerage connections and so on; it may be "built-up", having buildings already on it.

¹ An exhaustive discussion of costs in the United States is available in Miles COLEAN : *American Housing, Problems and Prospects* (New York, Twentieth Century Fund, 1941) and in the Temporary National Economic Committee Monograph cited above

The pure value of land is most easily isolated when raw land is considered. The value of land will be determined by its most remunerative alternative use. Any purchaser must pay at least as much as would be offered by anyone else. The price will vary, therefore, according to the nature of the alternative uses — that is, according to the amount of competition for particular pieces of land. The cheapest raw land suitable for urban house building is likely to be on the outskirts of existing cities. Any potential purchaser of this land will probably have to compete with alternative users such as farmers, particularly market gardeners, and other builders seeking to develop it for residential purposes. Land values in this class will depend on the amount of alternative land available and on the quality of transport connecting it with places where people want to work, to shop, to amuse themselves and to visit. As transport connections improve, more and more land becomes available for residence in relation to any city and a downward pressure will be exerted on land values. This may be more or less offset by an increase of population exerting an upward pressure on values.

Land which is regarded for one reason or another as being of better location will be of higher value. Thus, for instance, there will be a tendency for land values to be higher, the nearer the land is to the centre of the city. More people will compete for it and will be willing to pay more to get it, because of its convenience of access to business, to friends and to entertainment. Transport costs will be less and transport facilities will be better. Moreover, it is likely to be improved land, and its value will be increased by the capitalised value of these improvements. If it is suitably located for business or commerce, and if its use for those purposes is not prevented by zoning ordinances, its price will also be affected by competition for it for those purposes. Finally, if the land is already built on, its purchase price will have to cover not only the value of the land, its improvements and its location but also the capitalised value of returns expected from the building already on the land. In some centres, for instance, development has been so rapid and optimistic that relatively new and remunerative buildings have been bought up and demolished in order to erect bigger and better buildings on their advantageous sites. The cost of land for the new buildings then has to cover the full value of the old buildings. This aspect is important in dealing with the problem of slums. Poor as the buildings may be, provided the rents and location are such that large numbers of people wish to or are

forced to live in them, a large total rent-roll will be received from a relatively small but densely built-up piece of land. The land value will therefore be high, which will operate strongly against its purchase for less crowded housing development.

Geographical relationship to the centre of the city is, however, not by any means the only, or even the most important, determinant of the locational value of land. In a new city, with inadequate roads and transport, it is important to live near the centre. As facilities improve, the advantages of other centres in health, beauty, convenience and quiet become rapidly more important. As these new centres develop for residential purposes, factories and businesses are attracted to them also. Moreover, as people move out from the centre to these new areas, demand for central locations diminishes and "blighted areas" develop. Development of transport facilities will be, again, the most important factor in developing new and attractive locations.

Land values seem to be highly sensitive to neighbouring influences. Thus, for instance, raw land in the centre of a city, in a slum or blighted area, should theoretically be of very little value. Yet in fact owners will often refuse to sell at less than the price of nearby land, which may be high because it is being used for business or because it has remunerative slum dwellings on it. Moreover, because of the popularity and prestige of land as an investment, land values tend to be high and rigid and therefore to contribute to the inadequacy and instability of housing. During a building boom, land values rise rapidly. Every landowner hopes that his land will be essential to building development and increases the price which he demands for it. When the boom breaks, he is disappointed but, instead of reducing the price for which he will sell, he is inclined to hang on and wait till buyers are willing to pay his price. There are from time to time spectacular crashes in land values; but these are rare. On the whole, land values rise readily, fall slowly and are in general kept up by the widespread desire to own land.

CONSTRUCTION COSTS

The bulk of construction costs depends on the cost of labour and the cost of materials, the latter usually being somewhat greater than the former.

An outstanding feature of the building industry is the small scale on which production of houses is usually carried

out.¹ Houses as a complete and assembled product are difficult to transport; much of the production tends therefore to be carried out on the site on which the house is finally to be located. There would still, however, appear to be fair scope for large-scale productive processes, both in producing in factories parts to be assembled at particular sites, and in organising building so that a large number of houses could be erected simultaneously on adjacent sites by large-scale methods.² Partly because of opposition from consumers, and partly because of the extreme instability of output which makes very risky the incurring of heavy overhead commitments, such developments towards large-scale methods have been slow. The industry has remained predominantly a preserve of small firms, which have proved their ability to compete successfully with producers who have used large-scale methods. In turn, the smallness of most building enterprises and their wide geographical diffusion have operated against co-ordination and co-operation in the industry, and against discussion and understanding of the need for an improvement of efficiency, and of the ways in which that improvement might be achieved. Consumers' prejudices and whims operate strongly against the development of large-scale methods and are encouraged and flattered by building operators, often with disastrous effects on the appearance of a community. Houses are built singly to individual plans by small groups of craftsmen, operating primarily with their hands and a few elementary tools on materials which, although they may have been produced efficiently by modern factory processes, are still

¹ "Private residential construction in the United States is still on the whole a small-scale enterprise operated on next to no capital. A survey by the Bureau of Labor Statistics showed that 64 per cent. of the home builders in 72 cities produced only one house in 1938, while only 6 per cent. built as many as ten. Seventy per cent. of the houses were provided by builders of less than 25 homes, and in cities with a population of under half a million this proportion increased to something like 95 per cent. The typical contractor has three employees or less, and undertakings in the building field have the smallest average assets of all types of undertakings, including those in agriculture." Catherine BAUER, *loc. cit.*, pp. 10-11.

² "To build a hundred houses at a time is cheaper than to build them singly. The savings arise not only from the standardisation of parts that is possible and the cheapness of bulk supplies, but from the fact that labour can be much more economically used. As soon as a gang of men have finished an operation on one house they can move on to the next instead of having to spend time in travelling. Moreover they become used to performing a series of identical operations and therefore work more effectively." *Homes for the People*, by a committee of the Association of Building Technicians (London, Paul Elek Publishers Ltd., 1946), p. 157.

but raw material to the building industry. The materials themselves are usually bought in small parcels from local dealers. Housing is the one product of any significance which has not been subjected to the extensive technological improvement which has developed in most other production. Methods of housing production are basically unchanged since ancient times.¹ On this ground alone, housing costs tend to be high relatively to other costs and to incomes.

In addition to the relatively low productivity of resources engaged in the building industry which results from the failure to industrialise methods of production, the industry is also widely alleged to be subject, at any rate in certain countries, to an abnormal incidence of monopolistic influences and restrictive practices. It is difficult to reach any definite conclusion as to whether this is so. Certainly the structure of the industry is favourable to the development of such a situation. In the first place, it depends on a large number of different types of materials and of labour, much of it highly skilled. The contribution of each type of material and of each type of labour to the total cost is therefore small, so that changes in the price of an individual material or in the wages of a particular type of labour make a negligible difference to the total cost of the house. In the second place, the producers of each type of material are often naturally protected against competition from each other by the high cost of transporting many types of building materials. Those operating in the same locality are relatively few in number and can fairly easily come to formal or informal agreement with each other concerning price policies. Similarly, the different types of highly skilled workers are usually organised into particularly strong craft unions. Finally, the extreme instability of the industry is a continual threat to the security of employers and workers in the industry and it would be only natural that they should seek, individually and through their associations, to protect themselves against the effects of these fluctuations in the level of activity.

¹ In saying that methods of housing production are basically unchanged since ancient times, it is not overlooked that there have been significant advances not only in the technique of producing and processing building materials, but also in the production in factories of some sections of houses, for instance window frames, previously produced on the site by craftsmen. It remains true, however, that the basic process of house building still depends on the assembly, at scattered sites, of an enormous number of small units of different materials by craftsmen using very little capital equipment.

Not only does the level of building activity fluctuate from year to year; it is also subject to wide seasonal fluctuations resulting in the main from the climatic difficulties of winter construction. Moreover, even in the busy season, work for particular groups of workers is likely to be intermittent. A painter, for instance, can do his painting on a house only when the house has reached a certain stage of construction. Having finished that job, he then has to find another house which has reached the stage of requiring painting. Too often, in the present state of management and organisation of the industry, he has to wait several days to get another job. Wage rates in the building industry tend to be high because of the intermittent and seasonal nature of employment and because of the strong organisation of workers in the industry. High wage rates need not in themselves mean high labour costs, but they do in the case of the building industry because the organisation and methods of the industry are not correspondingly productive. Despite relatively high hourly rates, annual earnings tend to be low because of the high incidence of unemployment.

Similarly, with manufacturers of materials, excess capacity is inclined to be large on the whole because of increases of capacity to meet occasional abnormally high demands. When demand declines, the normal tendency is not for some firms to close down as happens in more competitive industries, but for producers of similar materials to get together and share the reduced demand, charging higher prices in order that all producers may be able to carry on, although using only a proportion of their total capacity.

Because of the lack of organisation and co-operation between the many separate groups in the industry, and because of the small share of total costs which the cost of each group's services represents, the advantages of increasing output and reducing costs are not immediately obvious to the individuals concerned. Prevailing high costs, however, choke off potential demand, making the level of employment in the building industry low and unstable. Because of the importance of building employment to the general level of employment and incomes, this in turn reduces and makes more unstable the level of demand for building. Employers and workers may thereby be confirmed in their belief in the need for the restrictive practices which contribute to this vicious circle. If it can be broken and if costs can be reduced, the resultant increase of demand would permit an increase in the incomes of employers and workers, despite the reduction of cost per unit.

Yet another source of inefficiency in the building industry is the existence of local government building codes which differ widely from each other in different places, thus making it difficult for a large-scale builder seeking to standardise his materials and methods to satisfy requirements in all the different places in which he would have to operate. Moreover, the building regulations are of varying ages : few of them are up-to-date, and in general they are insufficiently flexible, either in their provisions or in their administration, to permit the ready and widespread adoption of new methods and materials. Such codes are essential to protect the health and safety of residents but it is unfortunate that they should be so drawn up that they help to prevent the residents getting cheaper houses. For instance, regulations laying down the minimum strength of walls are clearly desirable. But the regulations tend to be made in terms of the thickness of the walls and of the nature of materials to be used. Even if provision is made for changing the minimum requirements for new materials, existing producers are thereby given the opportunity to exert pressure to prevent new materials being introduced. Tests of new materials are expensive, especially if they have to be repeated many times, and builders may well find, particularly with small improvements, that it is simpler and less troublesome to go on using old methods.

The problem of high costs in the building industry may be illustrated by a series of quotations from an authoritative investigation into the low productivity of the industry in the United States ¹

¹ R. Harold DENTON : "The Relation of Productivity to Low-Cost Housing", in *Toward More Housing* (Temporary National Economic Committee Monograph No. 8, cited above), pp. 130 *et seq.* Cf. also *Final Report and Recommendations of the Temporary National Economic Committee* (U.S. Senate Document 35, 77th Congress, 1st Session); *Investigation of Concentration of Economic Power: Hearings before the Temporary National Economic Committee, Congress of the United States*, Part II, Construction Industry (Washington, 1940), and Part 31-A, Supplemental data submitted to the Temporary National Economic Committee, pp. 18173-18194. For additional material on this subject, see *American Housing Problems and Prospects* (New York, Twentieth Century Fund, 1944), pp. 101-111; Lee LOEVINGER : "Handicraft and Handcuffs — The Anatomy of an Industry", in *Law and Contemporary Problems* (Duke University), Vol. XII, No. 1, Winter 1947, pp. 47-75; Corwin D. EDWARDS : "Legal Requirements that Building Contractors be Licensed", *ibid.*, pp. 76-94; William HABER : *Industrial Relations in the Building Industry* (Cambridge, Harvard University Press, 1930), Chapter VIII and pages 571-572; and *Anti-Trust Cases in the Construction Industry*, Report to 79th Congress, Second Session (Washington, 12 Sept., 1946).

Productivity and Costs.

Low productivity in the building industry may be traced to many causes, the most important of which are lack of co-ordination and systematic organization, failure of the industry to keep pace with other industries in technological improvement, prevalence of restrictive practices throughout the industry which deliberately limit output and prevent the introduction of cost-saving materials and methods, backwardness of design and lack of standardization in measurement which prevent mass production of larger units of materials, and the retarding influence of tradition... Wage and price reductions will not alone solve the housing problem. The building industry is a customing industry, producing a product to individual measurement by wasteful handicraft methods. Until system and efficient methods of production are introduced, housing costs will remain beyond the reach of most families... It should be observed that productivity has increased in many industries engaged in the manufacture of building materials, and in this respect there has been technological progress in the building industry. Although building materials are produced by modern mass production methods, however, they are merely the raw materials from which a finished product is to be made.... A house is assembled from many thousands of small individual pieces. A four-room brick-veneer house, for example, will require over 18,000 bricks each of which must be handled many times before it becomes a part of the house. The roof alone will contain some 9,000 shingles, each of which requires separate handling... The units of material are so small, and the methods of assembly so inefficient that increases in productivity in the manufacture of building materials have had little effect upon the ultimate cost of the house....

Mechanisation.

The tools used in the building of houses are mainly hand tools. Very little power machinery has been introduced. The average investment in equipment per employee [in the United States in 1929] was considerably lower for building contractors than for those engaged in any other type of construction work... Contractors usually operate upon too small a scale to justify a large investment in equipment. Entirely satisfactory machinery for all building operations has not been developed, partly because many of the operations are by their nature hand operations, such as bricklaying. Furthermore, building-trades-unions have vigorously opposed introduction of labor-saving machinery and devices...

Belief in Limited Amount of Work Available.

Uncertainty and fear arising from the belief that there is only so much work to be done have resulted in the imposition of a wide variety of harmful restrictions upon efficiency, particularly on the part

of labour. Each worker nurses his job, whether he be a union man or non-union. In the case of union members, restrictions to spread the work or to maintain traditional methods take tangible form and are written into agreements or working rules of the unions. There are rules which limit the supply of labour by imposing rigid apprenticeship regulations and entrance requirements: rules which require that skilled tradesmen do unskilled work, such as carrying materials from truck to place of use. Other union rules prohibit or restrict the installation of shop fabricated materials ... Rigid jurisdictional distinctions in the building trades are in general also traceable to this belief that there is only a limited amount of work to be done. Each trade regards the right to perform a particular type of work as a property right, and carefully protects the methods and tools of its trade. Division of work among the trades in the building industry is not determined upon the basis of efficiency, as in manufacturing, but according to superior bargaining position ...

Management.

Throughout its operations, the building industry has failed to adopt efficient methods of management. The possibilities for cost reduction through scientific management are illustrated by results obtained from its application upon a large housing project in France. From 1920 to 1937, the Michelin Low-Cost Dwelling Corporation built houses for more than 3,000 employee-families of the Michelin Tire Factories at Clermont-Ferrand. In 1920, 11,643 working hours were required to build a house. In 1937, only 5,548 were required, or less than half. In 1920, the construction foreman and labour supervisors were responsible for preparing and organising the work, such as building up working gangs, providing them with materials, selecting the tools to be used, choosing the labour methods to be utilised, and determining the time to be allowed for each job. After 1920, a planning department was set up, and all the functions of preparation and organisation of the work were turned over to its engineers.... On the ordinary building job, it has been estimated that more than 25 per cent of the average craftsman's time is spent in making decisions as to his next move. Each operation offers a new problem to be solved.... Both management and labour are responsible for the obsolete management methods which persist in the building industry.

Standardisation.

A further important reason for excessive building costs is the fact that houses are built to individual specifications even in the essential elements. There is little standardisation of materials or dimensions. Room heights, wall thicknesses, window and door

openings, room lengths and widths vary sometimes by fractions of an inch, and almost every item of material used in the production of a house can be purchased in several sizes. The wide variation in sizes and use of fractional dimensions does not add to the individuality of houses, but very seriously limits the possibilities for mass production of materials, requires the carrying of large inventories, results in confusion, and seriously interferes with the introduction of mass production methods in the building industry. One manufacturer lists as stock, ready for delivery in its regional warehouses, 82 different kinds and sizes of double-hung windows alone. Even bricks come in different sizes. . . It has been clearly demonstrated . . that any number of house plans and styles can be designed upon modular dimensions, using 4 inches as the smallest unit of measurement, instead of fractions as at present.

Co-ordination.

The building industry is made up of many separate and independent groups. Each group is organised as a business in itself. Each performs its special function with little relation to the others. There is no over-all management, and no effective co-ordination. . Every effort at simplification or improvement of the production process meets with vigorous opposition on the part of one or more of these independent groups into which the industry is divided. One of the more common types of opposition may be illustrated by several cases which have come before the Federal Trade Commission in recent years in which retail dealers have organised to force all building materials through the established retail channels . . Building materials are for the most part purchased in small quantities from the local hardware store or lumber yard . . Manufacturers often refuse to sell their products to groups representing new methods of sale or new price policies. Sometimes they exercise their patent privileges to control unpatented products also. Contractors combine to keep all work for member contractors, and secure agreements whereby labour refuses to work for contractors who are not members of the association. Contractors also combine to prevent competition from out-of-town contractors, and to prevent the use of prefabricated materials. Legislative bodies, both State and local, assist in many of these restraints by requiring licenses for contractors, by prohibiting the use of out-of-State materials, and by inserting rigid and unnecessary requirements in local building codes.

While less information on these aspects of the building industry is available for other countries, such information as is available suggests that many of the factors noted above as

limiting efficiency and productivity in the United States operate also elsewhere.¹

The balance of construction cost over and above the cost of labour and materials consists of the sum taken by the builder to cover his overhead and provide his income, and various fees for architects, surveyors, permits and so on. The builder's fee for a particular house will vary according to the number of houses he builds in a year. If he is responsible for building many houses, his overhead and his own income will be spread more widely and will fall more lightly on individual houses. But if, as is more often the case with the small builder, he builds but few houses and wastes his organising ability by doing some of the work that could be done by skilled and unskilled workers, his charge per house will be much higher, even though his total income may be less. The architect's fee will also vary according to the number of houses being built to a particular design. The fee of \$50 listed for the example at the beginning of the chapter is for a basic design for a large group of houses. The fee would be nearer \$300 for an individual house.²

HEIGHT AND RIGIDITY OF BUILDING COSTS

Because of the extreme irregularity of activity in the building industry, the limited extent to which it has developed modern industrial methods, and its consequent low productivity, building costs tend to be high relatively to other costs and to the incomes of the community.³ Moreover, because of the tightness of industrial organisation within small sectional groups of both workers and manufacturers of materials, costs in the building industry tend to be more inflexible than other costs. In a

¹ It may be recalled, for example, that the Mission appointed by the British Minister of Works in 1943 to study and report on building methods in the United States noted certain respects in which the building industry in the United States was more efficient than its counterpart in Great Britain. There was, for instance, closer co-operation among the various parties concerned in the typical building job; costing of all job labour by contractors was fuller, more accurate and more efficiently summarised than was usual in Great Britain; construction was more rapid and interest charges on construction finance therefore lower; and the use of small hand power tools was much more widespread among all trades, especially in the carpentry trade. Average output per man-hour was greater in the United States than in Great Britain. (UNITED KINGDOM, MINISTRY OF WORKS : *Methods of Building in the U.S.A.* : The Report of a Mission appointed by the Minister of Works (London, H M Stationery Office, 1944), pp 12-14)

² Peter STONE, *op. cit.*, p 72.

³ It may be noted that the figures on page 45 appear to lend support to this conclusion.

period of falling demand, reduction in costs may be hampered by implicit or tacit agreements among manufacturers to maintain their prices and among workers to spread available work as much as possible.¹ The contribution to the total cost of a house of the wages paid to a particular craft of workers and of the prices paid to manufacturers of a particular material is small. No individual organisation can see any advantage in reducing its prices or increasing its efficiency — the effect on the final price of the house, and on demand for houses, would be too small.² There is no co-ordination or co-operation between the various groups which would enable them to take advantage of the expansive possibilities of combined reductions in price and increases in efficiency. Similarly, when demand expands, each group sees the opportunity to recover some of its losses during the depression of demand.

Cost of Purchasing a House

The first type of cost arising in connection with purchase of a house and the land on which it stands is the establishment of title. History and law have combined to make this, in many places, difficult, uncertain and correspondingly expensive. The relatively simple and cheap, although initially expensive, Torrens system of title registration has been adopted in several places but is by no means universal, its adoption being opposed by those who gain from the complexities which exist without it. Other fees also arise in connection with a house — legal fees, brokerage charges, interest and taxes during construction and so on. If the house is bought on a mortgage, further substantial fees are incurred in arranging the finance. The total fees of this

¹ See B. H. HIGGINS : "Housing Finance and Operation", in *Planning of Canadian Towns and Cities* (University of Toronto, School of Architecture, 1944) Lecture XIII, pp. 11-13

² In the United States, for example, it has been noted that "The electrical supply dealer... specialises in selling and installing electrical wiring and equipment in the house. The manner in which houses are wired may be technically obsolete. Yet electrical work represents only about 3 per cent of the final cost of the house. The dealer therefore has little interest in the house as a completed unit, and any savings which he alone might effect would only slightly alter the ultimate cost. The same is true with every other element in the industry, whether it be the carpenter, plumber, mason, supply dealer, or manufacturer. Each participant operates independently of every other, except through a brokerage arrangement, and no one has effective control over or great interest in the total cost of production". (R. Harold DENTON, *loc. cit.*, p. 129.)

nature in the case of the typical house referred to above amount to \$175. The size of this sum gains added significance from the fact that it has to be found at the same time as the substantial down-payment of \$500.

The great majority of houses are bought on mortgage. Given the cost of construction, the monthly cost of a house to the purchaser depends chiefly on the period of amortisation and the rate of interest charged for the loan.¹ The period of amortisation is normally shorter than what may reasonably be expected as the life of a house. The mortgagee naturally wishes to have his capital repaid as soon as possible, thus reducing the duration of his risk of having to undertake an expensive and possibly unprofitable foreclosure on the house. The mortgager has, as a result, to pay interest on his loan for a shorter time but, on the other hand, has to make substantially higher monthly repayments of capital for the shorter period and has therefore to forgo alternative avenues of expenditure. The effect of the period of repayment on the size of instalments is substantial. Table VIII shows the annual payments necessary to repay \$1,000 over varying terms of years, assuming that these payments can be invested at 5 per cent. These payments are exclusively sinking fund payments and make no allowance for interest payments on the principal, which have to be fully maintained throughout the period for which the sinking fund is being accumulated.

TABLE VIII. SINKING FUND OF \$1,000 AT 5 PER CENT.²

Period of repayment years	Annual payment required \$
20	30.2
25	21.0
40	8.3
50	4.8

It will be seen that with repayment in 25 years the annual payment required to repay \$1,000 will be \$21. If the period

¹ There is no significant difference if the house is bought for cash. In the case of a mortgage, interest has to be paid and the capital has to be amortised. In the case of a cash purchase, the interest that could have been drawn on the amount represented by the original purchase price has to be forgone (or current consumption has to be forgone) and the house depreciates. Only the case of the mortgage is discussed here.

² These figures are available in any set of actuarial tables, e.g., R. E. UNDERWOOD *The Elements of Actuarial Science* (Sir Isaac Pitman and Sons, London, 1922), pp. 39-56 and table IV.

is doubled to 50 years, the annual payment required is reduced by more than three quarters to \$4.80.

To this amortisation payment has to be added the annual interest charge. If the mortgage rate of interest is 5 per cent., the annual interest payment on \$1,000 will be \$50, which will have to be paid until a sufficiently large sinking fund has been accumulated to wipe off the debt. If 50 years are taken to accumulate the sinking fund, \$50 a year must be paid for the whole 50 years. If substantially higher annual payments are made into the sinking fund to enable it to be paid off in 25 years, the annual interest payment will have to be made only for that lesser period. With mortgage repayments, the usual practice is for the mortgagee, in effect, to accumulate the sinking fund out of regular instalments paid by the mortgager, determined at whatever figure will cover interest and sinking fund charges.¹ Table IX shows the annual payments required to pay interest on and to repay a loan of \$1,000 in varying periods of years and at varying rates of interest.²

TABLE IX. ANNUAL PAYMENTS NECESSARY TO PAY INTEREST ON AND TO REPAY PRINCIPAL OF \$1,000 OVER VARYING PERIODS AND AT VARYING RATES OF INTEREST

Period of repayment	Rate of interest		
	3 per cent	4 per cent	5 per cent.
20 years	\$ 67	\$ 74	\$ 80
25 years	52	64	71 ¹
40 years	43	51	58
50 years	39	47	55

¹ Cf. table VII pp. 50-51. Monthly payments on a 5 per cent. F H A. mortgage of \$4,800 are \$25.15 per month or 7.02 per cent per annum compared with 7 1 per cent. in this table. This fractional difference is accounted for by the fact that F H A. instalments are collected monthly whereas the above table is based on annual collection of instalments.

This table shows clearly the influence of the period of repayment and of the rate of interest on the size of instalment required to pay off the cost of any house. With a rate of interest

¹ In some cases the mortgager pays interest on principal outstanding, and makes variable repayments of capital at his discretion, probably with a stipulated annual minimum and maximum.

² It is assumed that the sinking fund can be reinvested at the same rate of interest as is charged on the original loan. This is likely to be the case with a mortgage company which can simply reinvest in new mortgages.

of 5 per cent. and a repayment period of 20 years, the annual payment required is 8 per cent. of the capital. With a rate of interest of 5 per cent. and a repayment period of 50 years, the annual payment is 5.5 per cent. — but the payments have to be kept up much longer. With a rate of interest of 3 per cent. and a repayment period of 50 years, the annual payment required is 3.9 per cent.

THE "PURE" RATE OF INTEREST

The basic element in the rate of interest charged on mortgages is the long-term rate of interest. This is usually thought of as the return which can be earned on completely risk-free and undated Government securities, which can be bought and sold with a minimum of inconvenience. The rate of interest measures the inducement that has to be offered to people in possession of assets to hold those assets in the form of a security (that is, a loan to, say, a producer) rather than in the form of money which is wanted, on the one hand, by investors as working capital and, on the other, by savers as a liquid asset. This rate of interest is a largely psychological phenomenon, much influenced by convention and expectations about the future. In the short period, it may fluctuate fairly widely. In a period of great uncertainty, such as a financial crisis, when people are reluctant to lose control of their money, preferring to keep it in liquid form, the rate of interest which has to be paid to obtain the use of money is likely to rise substantially. But over a long period, such as the last hundred years in a settled economy like England's, it has been very stable.

There are some grounds for believing that the rate of interest is often too high, in any event if full employment is accepted as a central economic aim. The economic function of the rate of interest in a fully employed economy would be to determine the allocation of resources among different types of investment goods. The resources available to the community are used to produce goods and services for consumption and for investment.¹ In order to achieve and maintain full employment, it would be necessary for all current income not spent on consumption, and therefore not giving rise to employment in consumption goods industries, to be lent to producers of investment goods at a rate of interest which would make it profitable

¹ It does not matter for the purpose of this discussion that some of the consumption and investment is achieved indirectly, through spending by Governments or in exchange for imports

for them to produce the appropriate amount of investment goods.

But the rate of interest required to fulfil this condition might be very low — at times, when producers' expectations were very pessimistic, a substantially negative rate of interest would be required. In an economy where money is not only a means of exchange but also a means of holding assets, it is impossible to have a negative or even a low positive rate of interest. At a time of depressed expectations, it will be preferable to hold \$100 in cash rather than to lend it at a low or negative rate of interest, which would offer no adequate reward for sacrificing the liquidity of a cash holding.¹

This demand for money to be held as an asset for the sake of its liquidity will vary from time to time with the state of expectations about the future. Sometimes there will be a desire to move out of securities into money, sometimes a desire to move out of money into securities. The supply of money is, however, not perfectly elastic but is determined by the institutions — both Government and private — of the monetary system. It is these changes in the demand for money, in conjunction with the independently determined supply of money, which determine the rate of interest. For instance, a 3 per cent Government bond with a face value of \$100 yields a fixed return of \$3 a year. When the market value of the bond is also \$100, the long-term rate of interest is 3 per cent. Holders of money are prepared to go on holding money rather than give up its liquidity in return for a 3 per cent. interest payment. Holders of bonds are prepared to hold bonds rather than lose 3 per cent. interest by holding money. If there then develops a general movement towards money, reflecting a depression of expectations, there is a pressure to obtain money by selling securities, including Government bonds. Unless the monetary institutions meet this demand for money by buying up bonds so as to make money available, the price of these bonds will fall until demand and supply are again equal. If the price drops to \$75, this is equivalent to a rise in the rate of interest to 4 per cent. If there is a movement out of money, there is a pressure to buy securities, including Government bonds ; if the price has to rise to \$120 in order to equate demand

¹ The "liquidity" of cash has two closely related aspects — there can be no risk of its value depreciating in terms of money, and there can be no delay or inconvenience in converting it into money. Different types of securities which might be held instead of money, such as short-term or long-term Government bonds, mortgages, land, industrial securities, houses and other physical goods, are progressively less "liquid" in these two respects than money.

and supply, this is equivalent to a fall in the rate of interest to 2½ per cent.

The rate of interest is therefore determined by the demand for and supply of money. Far from being determined at the rate which will ensure the use of all resources available for investment, it is instead determined independently, and in turn determines the extent to which these available resources are used at any time. Only such investment goods will be produced as are expected to earn a return equal at least to the rate of interest. If people still have unspent income available when all such avenues of investment have been exhausted, they may prefer to hold their resources in the form of money rather than to lend or to invest it at a lower return. The effect of this decision would be that resources would be left idle.

The extent of unemployment that will result from this situation will be determined by the reduction of income that is necessary to bring "unspent income" to equality with the investment that can be undertaken at current rates of interest.¹ The point of this argument has been to establish that — given the tastes of the people, their expectations about the future, the terms of trade, their foreign lending policy and their social philosophy (which together determine their private consumption, their balance of overseas trade, the level and composition of Government revenue and expenditure and the nature of redistribution of incomes effected by Government action) — the existence of idle resources suggests that the rate of interest may be too high, at least if full employment is accepted as a fundamental economic goal. The existence of unemployment at any particular time does not necessarily mean, however, that the rate of interest is too high. There are too many uncertainties in the assumptions on which the argument is based. Full employment is, after all, a relatively new economic goal. It may be that when people come to understand its implications, they will prefer to use up idle resources by increasing their consumption, by reducing their hours of work, by increasing their foreign loans or by increasing Government expenditure on social services, rather than by reducing the rate of interest so as to increase the

¹ Unspent income which is not offset by investment or other forms of spending discussed in Chapter II will result in unemployment. This reduces total employment and incomes, but it also reduces consumption and investment. There will therefore still be some income unspent so that there will be a further fall in employment and incomes, continuing until unspent income is reduced to equality with whatever level of offsetting expenditure will be undertaken at that level of employment.

range of investments that may be undertaken. However, even with these qualifications, it does seem reasonable to conclude that, at least during the inter-war period, the long-term rate of interest was somewhat higher than was economically desirable.

It may well be that, owing to institutional factors such as the cost of bringing borrowers and lenders together, and the lenders' concept of what the rate of interest should be, it will be impossible, at least for some time, to bring the rate of interest down to a figure which will permit sufficient investment to maintain full employment. If this is so, there are strong grounds for advocating Government investment, for instance in housing, since Governments do not need to pay strict regard to the rate of interest in determining their investment policies. The extent to which Governments fail to meet the interest costs on their investments may be regarded as a measure of the cost to the community of the institutional factors which prevent a reduction of the rate of interest

THE MORTGAGE RATE OF INTEREST

The rate of interest charged on mortgages is higher than the "pure" rate of interest for two main reasons. In the first place there is a greater inconvenience and risk of loss involved in lending to an individual borrower than to a well-established, enduring and respected Government. A house is often difficult to sell and a heavy loss may have to be accepted, particularly if money is needed urgently. Government bonds, on the other hand, have a ready market. Moreover, although a mortgage is secured by a property of greater initial value than the size of the mortgage, there is always a risk that, apart from the question of urgency, the long-term value of the property may fall below the principal outstanding at that date on the mortgage. In any case, foreclosure on a mortgaged property involves costs and unpleasantness.

In the second place, there are certain costs arising in connection with mortgage business — on the one hand, in the case of an institution making loans on mortgages, funds for lending have to be borrowed from various small lenders, and in the case of an individual a borrower has to be contacted and a protracted legal procedure has to be gone through; on the other hand, the regular instalments from the borrower have to be collected and reinvested, accounts have to be kept and various inspections and investigations have to be carried out. The margin that has to be charged on these accounts will vary

widely. It will be at a minimum — probably as low as 1 per cent. — in the case of a large mortgage institution doing business with borrowers of first-class credit standing. It will be at a maximum — 8 per cent. or even more — with individual lenders lending to individual borrowers whose credit standing is dubious, where the risk factor is high, and where the overhead costs of making the loan cannot be spread over a large number of mortgages.

Mortgage rates tend to be relatively inflexible. The mortgage rate is not determined in terms of "return on Government bonds plus 2 per cent." but as an independent rate of, say, 5 per cent. Any change in the rate will involve extensive refinancing of existing mortgages, and the establishment of new bases of accounting; moreover, if changes were made frequently in an operation requiring such long-term commitments, each change would produce conflicting expectations about future changes. Mortgage institutions therefore avoid change for as long as possible — they seek to avoid altogether being influenced by short-term fluctuations and to adjust their rates only to long-term changes. However, the long-term changes are of course difficult to recognise at the time when they are taking place. Changes in mortgage rates are therefore likely to lag behind changes in long-term rates of interest. Changes will, however, eventually take place — if mortgage rates are persistently above their due relation to the long-term rate, mortgages will be arranged outside, thus forcing the institutions to reduce their rates in order to retain their business; if mortgage rates are persistently below their due figure, funds will move out of mortgages into alternative avenues of investment.¹ Mortgage rates tend, therefore, to be less flexible than the general rate of interest, but the relative inflexibility is at least in part inevitable where private mortgage institutions, incompletely apprised of the future of the long-term rate of interest, are chiefly responsible for lending. The mortgage market is by no means purely competitive, so that, in particular, downward movements of mortgage rates are likely to be unnecessarily delayed. Entry of lenders into the market is restricted by the amount of capital needed by large lending institutions, and by the difficulty for small lenders of contacting borrowers and the inconvenience of carrying out the protracted business of a

¹ An illuminating discussion of the determination of mortgage rates and of changes therein is available in W. F. STOLPER "British Monetary Policy and the Housing Boom", in *Quarterly Journal of Economics*, Nov. 1941, Part II, pp 42-60.

mortgage lasting over many years. Imperfection of competition in the mortgage market means that, on the whole, the margin between the long-term rate of interest and the mortgage rate is likely to be unnecessarily high.

Moreover, a "first" mortgage normally covers only a proportion of the total cost of the house. The F.H.A. mortgage instanced in this chapter gives a fairly high cover — \$4,200 out of the total cost of \$4,975. Private mortgages usually cover a smaller proportion of total cost. Many buyers, particularly in view of the expenditure on furniture and equipment which often accompanies the purchase of a new house, are forced to seek a "second" mortgage to cover the balance. Since the security for this mortgage is much less, the first mortgage having first claim, the rate of interest charged is much higher.

The period of repayment on mortgages is usually fairly short. A borrower who wishes to spread his amortisation over a period of 50 years will have difficulty in finding a lender on those terms, and will possibly have to pay an abnormally high rate of interest. Another important difficulty making for unnecessarily high mortgage rates, particularly for lower-income groups, is that which an individual experiences in establishing his credit-standing. It is relatively easy for a salaried official with a banking account and high job-security to arrange a mortgage on favourable terms. A wage earner, whose job may in fact prove equally secure, is likely to have much greater difficulty in arranging a mortgage. The incidence of unemployment is, from time to time, widespread and extensive, and mortgage rates make full allowance for that risk, the realisation of which would greatly affect the ability of a worker subject to it to repay his debt.

OTHER EXPENSES

Insurance and heating expenses are inescapable parts of the monthly cost of house-ownership. Regular expenditure on maintenance, repairs, alterations and so on will depend on the owner's choice as to how rapidly he is willing to let his house depreciate and the extent to which he wishes to incorporate improvements in it. The cost of this type of building activity is likely to be high and unduly inflexible, as in building activity generally.

Property taxes are an important element in the monthly cost of a house. Local governments in particular traditionally draw the bulk of their revenue from taxation of real estate

property. This was appropriate in times when the ownership of property was the best index of a taxpayer's ability to pay taxes. Now, however, the main body of total public revenue is raised by taxation based chiefly on taxpayers' incomes. Property taxes are fundamentally a survival from a different sort of economy and act as a hindrance in the development of better housing standards. The burden of such taxes is severe.

For the United States as a whole, the average monthly tax instalment represents about 33 per cent. of the average monthly loan payment. However, in four States real estate taxes are equivalent to 50 per cent. or more... . If the tax bill is related to interest alone, the average tax is equal to about 80 per cent. of the interest portion of the regular loan payment, and there are ten States where it actually exceeds the total interest charges to the borrower ¹

Assessments are inevitably inexact and are usually expensive, out-of-date, uncertain, inflexible and subject to pressure from interested parties. Since they fall on real estate rather than on other forms of property, they discriminate against investment in real estate. Since property is often assessed on estimated long-term value rather than on actual current earnings, they often form an additional hazard to investors who run the risk of having to pay constant taxes in the face of actual earnings which may at times fall even below the taxes. Tax rates vary substantially between different localities. Houses cannot however be moved from place to place according to variations in tax rates. On the other hand, the incidence of these taxes can greatly influence the location of factories and therefore the decision where people will live.

In some countries the nuisance of property taxes has been reduced, on the one hand, by basing assessments more on current income from the property and, on the other, by making up a larger proportion of local government revenues from grants from central Governments which collect their revenue on a less discriminatory basis. The property tax remains a force discriminating against the development of investment in real property, and highly inflexible in its incidence.

Costs of Renting Houses

The rent paid by a tenant must in the long run cover the costs to the owner of owning the house — that is, interest and depreciation or interest and amortisation on the capital cost, plus

¹ *Federal Home Loan Bank Review*, July 1941, p. 335.

taxes, insurance, repairs, maintenance and so on. Repairs and maintenance on rented houses are naturally likely to be smaller than on an owner-occupied house where the owner seeks to maximise his own satisfaction rather than his net income. The rent must also cover the risk of vacancies and the costs of management, and it must in general provide sufficient return to persuade the owner to continue with the business of letting. The cost of renting a house contains therefore all the high and inflexible elements of costs that have been discussed above.

Rents, however, have an additional element of inflexibility. They are usually embodied in a contract — the lease — which may be for one year and is often for a longer period. Moreover, rents are regarded by both parties as fairly inflexible commitments. In the absence of changes in tenancy, they are likely to be adjusted upwards or downwards only at long intervals. When changes in tenancy occur, landlords are able more conveniently to increase the rent if circumstances permit; they are much more reluctant to reduce the rent. However, persistent vacancy and the danger of their empty houses being broken into will force them to a reduction eventually if circumstances require it. Rents, like costs of land, of construction, of mortgages and of property taxes, are thus likely to be relatively inflexible, and changes in them to lag behind and be dependent on changes in the general level of activity; moreover, all these costs are likely to be more flexible in respect of changes upwards than of changes downwards.

CHAPTER IV

THE DEMAND FOR HOUSES AND THE LEVEL OF BUILDING ACTIVITY

The subject of this study is housing activity which, in providing new houses and in repairing, altering and demolishing existing houses, can give rise to employment and to an improvement of living standards. However, a large number of new houses, of good quality, standing empty because they are in the wrong places, of the wrong sizes, or at the wrong prices, will represent merely a waste of resources which could have been put to better use. Housing activity should result in the new and improved houses being bought or rented by consumers, because they actually want those houses and not just because they cannot get anything better.

In order to establish the amount of building activity that should be undertaken each year, it is necessary to analyse the factors which determine the demand for and supply of houses and which therefore lay down the conditions under which houses can be built and used. In this chapter, the nature of the demand for houses is first examined, no allowance being made for the influence of changes in the supply price of houses. The market for housing is then analysed to show how the price of houses and the level of building activity are determined.¹

¹ Extensive use has been made of the work of a number of investigators of demand and supply for housing. Particular mention should be made of C. D. LONG : *Building Cycles and the Theory of Investment* (Princeton, Princeton University Press, 1940); H. W. ROBINSON : *The Economics of Building* (London, P. S. King and Staples Ltd., 1939); W. H. NEWMAN. *The Building Industry and Business Cycles* (unpublished manuscript, University of Chicago Library, 1934), W. F. STOLPER. "British Monetary Policy and the Housing Boom", in *Quarterly Journal of Economics*, Nov. 1941, Part II; W. ISARD. "A Neglected Cycle : The Transport-Building Cycle", in *Review of Economic Statistics*, Nov. 1942. An extremely useful study of the demand for housing, including an analysis of most of the important current literature on building cycles, has been made by J. W. CHAPMAN. *The Long Building Cycle* (unpublished manuscript, Swarthmore College Library, 1943).

It is necessary at the outset to note an important difference between the effects of consumption of the service of shelter provided by housing and the effects of consumption of what are called "consumer goods". Consumption by a community of one million pounds of flour a year will require the production of one million pounds of flour a year. But the use by this community of 1,000 houses a year will not require the production of 1,000 houses a year. Houses are outstandingly "durable goods". Once built, they can be used over a long period of time, often for two generations or more. A constant demand for the use of 1,000 houses a year will require only such current activity, in repairs, alterations and replacements, as is necessary to keep the supply of houses constant. The demand for additions to the stock of houses will depend on *increases* in the total demand for houses. The demand for building activity is therefore something quite different from the demand for houses for occupation. However, the demand for building activity is clearly derived from the demand for houses for occupation. The latter must therefore be the first subject of study.

The immobility of houses is a second important characteristic. If a family moves from one locality to another, the move need make no difference to its demand for goods like flour — its supplies will simply be sent by distributors to a different place. But the family will need a different house in the locality to which it moves, and it will vacate a house in the locality which it has left. These internal migrations are so important that the problem of demand for houses cannot usefully be approached from the point of view of a whole country. The demand for additions to the stock of houses for the country as a whole depends not on the increase in the number of families in that country, but on the sum of the positive increases in the number of families in each locality in the country. Houses left vacant as the result of a net migration of families out of one locality cannot meet the demand for additional houses in localities where the number of families has increased. It is necessary, therefore, to examine the total demand for houses on the basis of the demand for houses in particular localities.

The Total Demand for Houses in Particular Localities

The total demand for houses in a particular locality depends on the number of families who want to live in that locality and the amount each is prepared to spend on housing. Since

demand for building activity depends in particular on increases in total demand for houses, it is necessary to analyse the factors which will cause total demand to change.

NUMBER OF FAMILIES IN A LOCALITY

The number of families who wish to live in any particular locality will depend mainly on the economic opportunities available to people living in that locality in comparison with opportunities available to people living in other localities. In general, an expansion of economic opportunity is likely to promote an increase in the number of families living in that location. The increase will arise in the first instance from more migration from other countries and from other localities in the same country. The increased population will at first crowd into existing houses and a minimum number of new houses. But, if the expanded economic opportunities persist, the demand for houses will grow — people will marry ; they will want to stop being lodgers and sharing houses ; they will have children. The extent to which the number of families will change in response to changed economic opportunities will vary greatly as between different groups of people and different periods of time, according to their attitude towards standards of living, towards childbearing and towards immigration.¹ For any one group of people, however, at any one time, the response should be predictable with fair certainty.

¹ The existing population may decide, for instance, to take advantage of increased economic opportunities to expand their numbers up to the point where average standards of living remain unchanged ; or they may decide to limit the increase of population so as to achieve increased standards of living — which they could do if there had previously been actual or disguised unemployment, or if there were "labour-saving" innovations in production methods ; or they may decide to limit the population increase still further to such an extent as to fail to take full advantage, in the way of increases either in population or in standards of living, of the expanding economic opportunities, either because they do not wish to have as many more children, or because they do not wish to allow as much migration, as the expanding opportunities would permit. Moreover, the supply of migrants may not be great enough to take full advantage of available opportunities, either because of the tendency of people to immobility, or because of the existence of more attractive opportunities elsewhere. The reaction on population increases of changed economic opportunity will depend on a wide complex of factors, such as the size and location of the existing population, their education, their philosophy of life, their history and so on. The most important factors which will determine changes in the reaction will be the changes in standards of living, in education and in philosophy which occur as the result of changes in economic opportunity.

In general, in a period of expansion, existing centres of production and population may be expected not only to retain their existing populations but also to grow in size. An existing centre offers important internal and external economies of production in the form of labour, market, transport and commercial facilities and so on, which will encourage existing firms to remain and which will attract new firms. However, different centres will grow at different rates and, from time to time, new factors will emerge strongly enough to establish new centres of production and population. These abnormally rapidly growing centres may draw their breadwinners from their own and other centres' natural increase of population — in that case, all centres may grow simultaneously, though at different rates. Relative economic opportunities may, however, be such that some centres suffer a decrease in population.

New economic opportunities attracting people to a particular locality may arise from the discovery of new resources and the discovery of new or wider uses for existing resources ; the development of new transport facilities permitting the immigration of greater numbers of people and/or the development of new markets and/or access to new supplies of raw materials ; the provision of other new facilities which may either attract industries directly or, by attracting people as residents, may attract industries to make use of the available labour and to exploit the expanded market.

These were the factors primarily responsible for determining the location of the enormous population increases in the last century. The development of transport, depending on innovations and on the availability of resources for investment in transport, was the great determining factor in the development of new regions. New discoveries and transport development are still powerful factors, of which perhaps the opening up of new mineral deposits is the most obvious illustration.

New economic opportunities in a particular locality may also arise from the development of new demands which can be supplied from that locality, and from changes in the relative productivity of industries producing in different areas. The types of goods and services that are demanded by consumers and investors are continually changing in response both to changes in tastes and to innovations. Closely connected with these changes, and arising independently also as a result of the development of new techniques, are changes in the relative productivity of industries in different areas. An important illustration of this is the almost universal tendency towards

urbanisation. As productivity and real incomes increase, there is a relative increase in the demand for goods and services produced by secondary and tertiary industries which are mostly located in cities.

An outstanding example of a different type of change in the location of industries is the "shift to the south" that occurred in the location of industry in England between the last two wars. As heavy, largely export, industries situated mainly in the north became relatively less productive, and as demand shifted to the products of lighter industries situated mainly in the south, there was a substantial shift of employment from the north to the south, accompanied by a corresponding shift of population and a substantial change in the demand for houses, despite the small change in total population.¹ The significance of such shifts is not likely to be overlooked in a country with as rapidly changing an economy as that of, for instance, the United States. It is striking, however, that a significant change in location of population, and therefore in the demand for housing, can occur in an economy as apparently settled and stable as that of England.

Finally, important changes in the demand for housing in any particular locality may arise independently of changes in economic opportunity in the area, if people wish to change their place of residence in relation to their place of work. This will appear as a change in taste, arising from people's desire to escape from overcrowded city areas. The movement which has been called "suburbanisation" has reached enormous proportions in recent years, and has had a profound effect in creating a demand for houses. The fundamental force determining the extent and speed of this movement is the extension and cheapening of transport facilities — suburban train, tram and bus services, the private motor car and express highways. Possible future development of air transport offers some prospects of extending the limits of residence in relation to place of work even further than at present.

EXPENDITURE PER FAMILY ON HOUSING

The amounts which individual families are prepared to spend on housing will depend on their incomes, their tastes, the size of the family and the cost of various items of their budget. Increases in the amounts families are prepared to spend on

¹ Cf. W. F. STOLPER : "British Monetary Policy and the Housing Boom", *loc. cit.*, pp. 97-107.

housing will result in a demand for better standards of housing. These increases may arise both as a result of higher incomes, out of which people will spend more for housing, and as a result of decisions to spend larger proportions of existing incomes on housing.

Increases in Incomes

Increased real incomes for families in general will arise from the long-term upward movement in productivity, due to the development of new resources and new methods of production and transport, the expansion of investment in production and transport and the rising skill of workers. Expenditure on housing will not, however, rise spectacularly as a result of such general and gradual increases in income.¹

Changes in the income of particular families can result also from changes in their own productivity and from changes in their bargaining power. A breadwinner may acquire a new proficiency or change to a better-paid job, or his trade union may secure higher wages for him. Such sectional increases of income can have a substantial effect on housing demand as they tend to raise the family from one social group to another, and so to induce it to acquire a house more in keeping with its new position.

Redistribution of incomes in favour of lower income groups, which is going on steadily under all progressive Governments, can also have a significant effect on housing demand, as income is taken from groups whose marginal expenditure on housing is small and transferred to groups whose marginal expenditure is much higher.²

Changes in the location of families may also have a significant effect on their demand for housing. While living in a particular house, a family may have been enjoying small and

¹ For instance, Ian BOWEN in an article entitled "The Future Output of the Construction Industries in the United States" (*Economic Journal*, London, June 1946) analyses housing demand in the United States during the 'thirties. He concludes that the income-elasticity of total private demand for housing is 0.33 — that is, a 10 per cent. increase in total expenditure would, other things being equal, result in a 3.3 per cent. increase in total housing demand. However, this relatively small change in total demand, while it may not represent much improvement in housing standards, could represent a substantial change in demand for housing activity.

² Note, however, the figures quoted earlier in Chapter I, p. 13, showing marginal expenditures on rent, which suggest that the housing of the lowest income groups, which is most in need of improvement, will benefit less from increases in income than will the housing of slightly higher income groups.

gradual increases of its income without bothering to seek an improvement in its standard of housing. If it changes its location, even without a change in income, it may decide to increase its expenditure on housing in order to get a better home. Similarly, if a family changing its location receives a higher income, it is more likely to seek a better standard of housing than if it were not changing its location. In addition, of course, the mere fact of an increase in income may induce a family to change its location.

Increases in Allocations from Incomes to Housing

The demand for housing activity may also increase if families decide to increase the proportion of their incomes that they will spend on housing. The chief factors which will make them decide to do this will be a change in the size of the family¹, a change in their housing tastes or a change in the cost of the various items in their budget. An increase in family size will obviously create a strong pressure to increase expenditure on housing in order to get a larger house. If this increase is general, the move cannot be accomplished by exchanging with other families diminishing in size, so there will be a demand for larger houses. Similarly, a general increase in the cost and scarcity of domestic service can, by creating a demand for better planned, labour-saving houses, create a demand for housing activity to produce such houses, even if

¹ Changes in the size of families can have important effects on the demand for housing activity, given suitable income conditions. The average size of families, and changes therein, are closely related to the question discussed in the previous section of the relation between changes in population and changes in economic opportunities. If an expansion of economic opportunities offers itself to people who have high birth rates and high mortality rates, the first effect of the higher standards of living will be a reduction of mortality rates, particularly for young people, and therefore an increase in the size of families. The demand for housing will be, therefore, not only for more houses for the larger number of families, but also for bigger houses for the larger size of families. Then — to judge by past experience — either because the expansion of economic opportunity is not large enough to provide for the increase in both number and size of families, or because people are no longer willing to rear such large families, birth rates and the size of families are likely to decline. The number of families may still be growing, but their size will be smaller, so the demand will be for more houses and for smaller houses. Finally, the state of economic opportunity may become such that the number of families actually declines. If the size of families is also declining, the community will still demand more smaller houses if existing houses are unsuitable for families of smaller size. These changes are essentially long-run changes. For any particular location, at any particular time, the size of families is likely to be fairly certainly predictable and to change but slowly.

that involves older houses being left vacant. The expenditure of families on housing may also rise if there is a fall in the prices they have to pay for other commodities. This is, however, equivalent rather to an increase in real income.

FUNDAMENTAL FORCES AFFECTING HOUSING DEMAND

Summing up this analysis of demand for houses for occupation, it can be concluded that the size, composition and location of population, which determine the number of families demanding houses, depend finally on innovations, the rate of investment and the response of population changes thereto ; on the location of industries which are expanding as a result of innovations and new investment ; and on where people want to live in relation to their place of work. The quality of housing which families will demand depends on their real income and the proportion of that income which they are prepared to allocate to housing expenditure. Real income depends finally, again, on innovations, the rate of investment and the response of population changes thereto, and on the distribution of total income. The proportion of income which families are prepared to spend on housing depends on their tastes, and on the price of various items in their budgets.

Increases in the number, size and location of families, and increases in the amounts they were prepared to spend on housing, all contributed to create an enormous demand for housing during the last century and a half. During most of that time, the increase in the number of families was dominant, with changes in the size and location of families and improvement of housing standards more or less incidental — broadly, the demand for houses of different sizes, in new localities and of better quality was met incidentally to providing houses for the growing number of families. Now that the rate of population increase in so many parts of the world has become so much smaller, and in some places threatens to turn fairly soon into an actual decrease, changes in the location of families and changes in the amounts they are prepared to spend on housing are certain to become dominant in determining changes in the demand for houses. It will not be useful, therefore, just to go ahead and build any number of houses, of any quality, in any place. If houses are to be occupied, they must be of the right sizes, of the right qualities, at the right prices and in the right places. Housing activity must be carefully planned to meet the demand for houses.

The development of transport has been and will continue to be of overwhelming importance in determining the demand for houses. One writer goes so far as to say : "Building represents more or less the culmination of the process of industrial, commercial and population adaptation to the changing character of transport. Thus, transport and building construction, both vital economic activities, represent in a rough manner the beginning and end of the causal relation, respectively."¹

Since innovations and the rate of investment can obviously arise independently of developments in transport and can, in fact, themselves inspire new developments in transport, this statement probably overrates the importance of transport. However, it cannot be denied that transport is of fundamental significance to the building industry. In the first place, it is a large and significant field for the development of innovations and for the absorption of funds and resources available for investment. It therefore has important effects on the level of employment, on the level of productivity, on the level of incomes and, finally, on the rate of growth of population. All these factors are vital in determining the demand for houses. Secondly, transport is of overwhelming importance in determining the location of industries and therefore of population, since industries depend on transport for bringing to them their raw materials and workers and for taking their products to market. The whole modern process of production, which is based on specialisation and division of labour, depends on transport for its co-ordination. Finally, transport is equally of overwhelming importance in determining where people decide to live in relation to the place where they work.

The Determination of the Level of Building Activity

In any particular locality, at any time, there will be a certain number of houses in existence. These houses will be of varying qualities according to their age, their design and the standard of their original construction. Some will be on the market for sale, some will be on the market for rent, some will not be on the market at all. The supply of houses to the market will alter in response to the state of the market. In the first place, owners whose houses were not on the market may decide that prices are such that they will put their houses on the market for sale

¹ W. ISARD, *loc. cit.*, p. 149.

or for rent ; or owners whose houses were on the market may decide that prices are such that they will transfer them from the selling to the letting market, or vice versa, or that they will withdraw them altogether. In the second place, with the passing of time, the quality of existing houses deteriorates through physical decay, wear and tear, and obsolescence. Eventually, a house will become uninhabitable. Thirdly, within limits, the deterioration of houses can be checked by repairs and maintenance, and the quality of houses can be changed through alterations. Finally, new houses can be built either to replace old houses that are no longer fit to be put on the market or to add to the stock of existing houses. The last two types of changes in the supply of houses require building activity ; the first two do not.

Demand for houses in particular localities will also vary. Given the price of houses, demand will depend on the number of families wanting to live in the particular locality and the amount each is prepared to spend on housing, as analysed earlier in this chapter. This demand will be made up of a demand, on the one hand, for houses to purchase and for houses to rent ; and, on the other, for the rent or purchase of houses of varying qualities. Again, however, demand will vary with changes in the state of the market. If house rents and prices in the locality rise, demand will change as some families decide to live elsewhere and as some families decide to seek houses of lower quality. A change in the relative levels of rents and prices will persuade some families to rent rather than to buy, or vice versa.

The interaction of these variable demands and supplies in the housing market will eventually tend to produce a condition of equilibrium with the total demand for houses equal to the total supply¹ ; with the prices and rents of houses at such a

¹ In the total demand for houses there should be included a demand for a certain number of vacant houses. For various reasons families want from time to time to change their residence from one house to another. As it can rarely happen that one family will be able to find a house that suits its needs and whose occupants not only wish themselves to move but also to move into the house vacated by the original family, a certain proportion of vacant houses is required to provide the degree of flexibility in occupancy which is desired by the community. The number of changes of residence that takes place makes it profitable in the long run to produce rather more houses than there are families seeking houses. It is difficult to set a normal figure for the degree of vacancy required but a figure often used is 2 per cent., that is, out of every 50 houses, there will tend eventually to be one vacant to give flexibility of occupation to the 49 families. If the vacancy rate rises above this figure, owners will seek to reduce their vacancies by lowering rents and prices.

level that an addition to the supply of houses by new building activity under current cost conditions would not be profitable; and with prices and rents of houses at such a level that the returns obtainable from the repair, alteration or replacement of existing houses would not make such building activity worth while.¹

In order to understand the nature of the forces that determine the level of building activity, it is convenient to start from this theoretical condition of equilibrium. It is simplest to define first the conditions under which there will be no building activity. Assuming that building costs remained constant, there would be no building activity only if the number of families and the amount they were prepared to spend on housing declined in keeping with the deterioration in quality of the existing supply of houses, and with the rate at which existing houses became uninhabitable. It would then not be profitable to repair, alter or replace the existing and deteriorating stock of houses.

Building activity will be required if the number of families and the amount each is prepared to spend on housing is any higher than the level assumed in the last paragraph. For instance, suppose demand remained constant at its original level. As houses gradually deteriorated, present occupants would find them less and less satisfactory, and would move out into better houses unless their present ones were repaired or altered to their satisfaction. Owners of existing houses would then have to decide whether to repair or alter them so as to keep up the returns obtainable for them, or to allow them to deteriorate and accept lower rents and prices, or to replace existing houses by new ones. Repairs, alterations and replacements can to a large extent be substituted for each other. Up to a certain stage it will clearly be desirable to keep a house in good repair, and possibly to alter it to conform with current tastes. Then comes a stage when repairs are less and less worth while and the house is allowed gradually to decline in quality and to move down through successive price and rent groups. Eventually, it will become uninhabitable except by undertaking unremunerative repairs and alterations, and it will either be

¹ The condition of equilibrium would also require that relative levels of rents and prices should be such as to equate demand and supply, on the one hand, for houses for rent and for sale and, on the other, for varying qualities of houses. It should also be noted that the equation of total demand and supply means that, at existing prices and rents, existing owners will not decide either to put more houses on the market or to withdraw houses from the market

abandoned or, if the site is suitable, it will be demolished and replaced.

So long as building costs and the effective demand for houses remain constant, building activity will be required to whatever extent is necessary to keep the amount and quality of housing constant. The amount of building activity required from year to year under these conditions could, however, fluctuate, since the distribution of houses, over various ages, various states of repair, and various rates of deterioration is likely to be such that maintenance requirements would differ from year to year.

Thirdly, the number of families may remain constant but they may decide to increase the amounts they are prepared to spend on housing in order to obtain better standards of housing. In this case, clearly, there will be an upward pressure on the rents and prices of better standard houses and a downward pressure on the rents and prices of poorer standard houses. It will pay owners to spend more on repairs and alterations and to demolish old houses rather earlier than they would otherwise have done, in order to replace them with newer and better houses which can command relatively more profitable rents and prices. Building activity will be required to whatever extent is required to bring about equilibrium under the new conditions of demand.

Finally, existing families may continue to spend constant amounts on housing, but new families may want to move into the locality. Vacancies of the types of houses they desire will be reduced and there will again be an upward pressure on rents and prices of these types of houses until sufficient additional houses have been built to restore equilibrium to the market.

So far, costs of building activity have been assumed constant. Two types of changes may occur in these costs. In the first place, the amount of building activity required in the various circumstances described above may itself, by increasing the pressure on building resources, provoke increased costs. If this occurs, then the new position of equilibrium at which building activity will cease will be reached the more quickly, so that the amount of building activity required will be smaller. In the second place, building costs and the costs of financing the purchase of homes may change independently of the rate of building activity — for instance, as a result of a change in wage rates or interest rates, or in methods of production. If costs fall, new houses will become relatively more attractive in comparison with existing houses, and repairs and

alterations will become cheaper. The prices and rents of existing houses will tend to fall and building activity will be required to repair, alter and replace those houses until a new equilibrium is attained. Conversely, if costs rise, existing houses will become relatively more attractive in comparison with new houses, and repairs and alterations will become dearer. The prices and rents of existing houses will tend to rise and repairs, alterations and replacements will tend to fall. Again, the change in the level of building activity will depend on the extent of the change in costs.

To sum up, the level of building activity in any locality will depend, on the one hand, on the number of families wanting to live in that locality and the amount each is prepared to spend on housing, and on changes therein in response to the supply price of houses ; and, on the other, on the number and quality of existing houses that would be put on the market in that locality at various prices and rents, and on the costs in that locality, at various levels of activity, of building required to repair, to alter, to replace and to add to the existing stock of houses. These two sets of factors will determine the rents and prices of different qualities of houses, the actual level of building costs and the amount of building activity carried on in the locality.¹

¹ Readers interested in formal analysis of the determination of equilibrium in the various housing markets should consult H. W. ROBINSON, *op. cit.*, especially pp. 84 *et seq.*

CHAPTER V

THE IRREGULARITY AND INADEQUACY OF BUILDING ACTIVITY

Why is building activity so extremely unstable, and why has it not been more successful both in providing employment and in improving the standard of housing available to the people ?

Influence of Demand on the Level of Building Activity

The foregoing chapter concluded that the demand for building activity is composed basically of a demand for repairs, alterations and replacements to maintain the existing stock of houses, and of a demand for additional housing arising from increases in the number and size of families and from increases in the amount each family is prepared to spend on housing. It was noted that, even with building costs and the total demand for housing remaining constant, the demand for repairs, alterations and replacements could vary from year to year since existing houses would be of varying ages and in varying states of repair. In one year an exceptionally large number of houses might require repair and, in the following year, repairs might drop to an unusually low figure. Moreover, the timing of these repairs, alterations and replacements is not dictated by narrow physical limits — they can generally be advanced or postponed by several years without serious detriment to the physical condition of the house. When economic conditions are favourable for a boom in the building of additional houses, they are likely also to be favourable for a boom in repairs, alterations and replacements, and vice versa. This "maintenance" demand for building activity is therefore likely to reinforce fluctuations in the "additional" demand for building activity, rather than to provide a stable basis for sustained building activity.

This aspect of the maintenance demand for building activity is in sharp contrast to the demand for consumer goods. If a country uses 100 million lbs. of flour in a year and if total demand for flour remains unchanged, there will be a demand for the production of the same amount of flour in following years also. Replacement demand from each family for the production of flour is fairly constant from year to year. But if at any one time the country has a million houses, not only are the houses themselves available in following years, so that they do not need to be replaced by new production; but the small amount of repairs, alterations and replacements required to maintain the houses can fluctuate substantially from year to year. Houses are extremely durable assets — perhaps the most durable, on the average, of all assets. This removes from the demand for building activity the basic element of stability which underlies the demand for consumer goods. "The fundamental guilt need not be with consumption, which can hardly avoid some mild deviation from the straight and narrow, but can be traced to the durability of most investment assets."¹

The balance of housing activity depends on the demand for additions to the total stock of houses. This additional demand for building activity depends on increases in the number of families living in particular localities and on increases in the amounts families are prepared to spend on housing. If these increases were substantial in relation to total demand — if, for instance, there was an average annual increase of 20 per cent. in total demand — it would be reasonable to expect a fair stability in the demand for building activity. The increase in one year might drop from the average 20 per cent. to, say, 17 per cent. and in another year might rise to, say, 25 per cent. These would not, however, represent unmanageable fluctuations in the amount of building activity required.

In fact, however, the average annual increase in total demand for houses is extremely small in relation to total demand — perhaps as low as 1.5 per cent., representing in a country with a million houses a demand for an average annual production of an additional 15,000 houses. If in one year total demand rises by the only slightly different amount of 0.5 per cent., the demand for additional houses falls by two thirds to 5,000. In the following year, however, demand may increase by the still only slightly different amount of 3 per cent. and the demand for additional houses will soar to 30,000. These are

¹ C. D. LONG, *op. cit.*, pp. 57-58.

exactly the sort of fluctuations that do take place in the total demand for houses and they go far towards explaining the extreme fluctuations in demand for building activity. Changes in the total demand for houses are small, but fluctuations in these changes, and therefore in the demand for additional houses, are likely to be large.

The number of families, and especially the number of families in particular localities, can change abruptly. The opening up of new opportunities in a particular area will attract a sudden increase in the number of families, who will migrate there from other localities and from other countries. A severe depression can develop quite suddenly and will reduce not only the amounts families can spend on houses but also the number of families seeking houses : families who would otherwise have wanted separate houses are forced to share with other families ; people postpone marriage so that the normal demand for new houses from newly married couples is reduced ; people postpone having babies and carry on in smaller houses than they would otherwise have needed. In a period of boom, all these factors are reversed and there is a sudden increase in the number of families seeking houses and in the expenditure each is prepared to make.

Wars also have a disturbing effect on the demand for houses — birth, marriage and death rates, the demographic factors so important to the demand for houses, are distorted from their normal progress and there are often large shifts in the location of population. (The much more important effect of wars on the supply of building activity is discussed later) Moreover, the effects of wars, booms and depressions on the demographic factors appear not only immediately, but also in subsequent generations whose age distribution is affected by these factors. For instance, during the first World War, birth rates fell heavily in many countries. Immediately after the war, the number of births rose rapidly. These movements had an immediate effect on the demand for houses ; they also affected, fifteen to twenty-five years later, the number of new recruits to industry, the number of marriages, and therefore the demand for houses.

The effect of these fluctuations in total demand on the demand for building activity is vital to the analysis of the building industry. No statistics are available of the number of families wanting houses in particular localities or of the amounts they are prepared to spend on housing. This is not important since it is a mathematical relation rather than a

specific set of figures that is being demonstrated. Some reality can be given to the figures, however, by using the number of people in work in the United States in the years between 1921 and 1937.¹ These figures, shown in column I of table X, are not unrelated to the number of families seeking houses. The fact that changes are negative as well as positive can be thought of as reflecting the changes which do in fact occur in the number of families seeking houses in particular localities, and also the tendency of families at times to "double up" and at other times to move out into separate housing units. In the table, attention is concentrated exclusively on the effect on the level of building activity of changes from year to year in the number of families seeking houses. For this reason, changes in the amounts families are prepared to spend on housing are assumed to be exactly offset by changes in the supply price of housing.

¹ Figures taken from Colin CLARK. *Conditions of Economic Progress* (London, Macmillan and Co., Ltd., 1940), p. 79.

TABLE X. LEVEL OF HOUSING ACTIVITY DERIVED FROM TOTAL DEMAND FOR HOUSES DURING A PERIOD OF POPULATION CHANGE¹

Year	I	II	III	IV	V	VI	VII
1	35.4	35.4	1	1.0	0.3	1.3	6.5
2	37.5	35.4	1	3.1	0.3	3.4	8.6
3	41.4	37.5	1	4.9	0.3	5.2	10.5
4	40.8	41.4	1	0.4	0.3	0.7	5.9
5	42.5	40.8	1	2.7	0.3	3.0	8.2
6	43.7	42.5	1	2.2	0.3	2.5	7.7
7	44.4	43.7	1	1.7	0.3	2.0	7.2
8	45.3	44.4	1	1.9	0.3	2.2	7.4
9	47.0	45.3	1	2.7	0.3	3.0	8.2
10	44.9	47.0	1	—	0.3	0.3	4.4
11	41.5	46.0	1	—	0.3	0.3	3.1
12	38.0	45.0	1	—	0.3	0.3	3.0
13	38.2	44.0	1	—	0.3	0.3	6.5
14	40.3	43.0	1	—	0.3	0.3	8.6
15	41.1	42.0	1	0.1	0.3	0.4	7.3
16	43.6	41.1	1	3.5	0.3	3.8	9.0
17	44.6	43.6	1	2.0	0.3	2.3	7.5

¹ Assuming that changes in the willingness of families to spend on housing are exactly offset by changes in the supply price of houses, and that the capacity of the building industry is perfectly elastic in response to changes in the amount of housing demanded.

Column I shows the number of families in work each year. Assuming that the supply price of houses is constant from year to year, and that each family in work spends the same amount on houses in each year, this is equal to the total demand for houses. It should be noted that in the case of consumption goods which are replaced at least every year, like flour, this column shows the actual amount of current production required to meet demand.

The activity required to produce new houses each year depends on the number of existing houses that are demolished and on the amount by which the number of families wanting houses each year exceeds the number available for occupation. Demolitions are assumed to take place at a constant rate of 1 million a year (column III). This implies for houses a relatively short life of about 40 years.

Column IV shows the number of new houses that have to be built each year. Demand and supply are assumed to be equal at 35.4 million houses at the beginning of the first year. During that year, 1 million houses are demolished and these are fully replaced, so that the supply at the beginning of the second year is still 35.4 million. In that year, 37.5 million houses are demanded so that there is a demand for building activity to produce 2.1 million to meet the needs of new families and 1 million to replace demolitions. In the third year, families increase by 3.9 million and altogether 4.9 million new houses have to be built. In the fourth year, total demand falls slightly, by 600,000. This brings an enormous drop in building activity since no new houses are needed to house new families, and only 400,000 of the demolished houses need to be replaced. Building activity recovers but continues to fluctuate through the next five years. In year 10, total demand for houses drops by 2.1 million. No new houses are needed at all as demolitions reduce the supply by only 1 million. This condition, of the supply of existing houses being in excess of demand, continues for five years. Only then do demolitions finally bring the supply of houses down to meet slowly rising demand.

For total building activity required each year, allowance must be made for repairs and replacements. These are assumed to be constant each year, and to require activity equivalent to the production of 300,000 houses a year (column V). Column VI shows total building activity required each year. It is important to note the great fluctuations in this column. These result from the relatively small fluctuations in column I, which are themselves modified by the stability of columns III and V. Thus,

between years 2 and 3, total demand increases by only 10.4 per cent., but this leads to an increase in building activity by 53 per cent. Between years 3 and 4 total demand drops by only 1.4 per cent., yet building activity is cut to less than one seventh of its previous level. Between years 8 and 9, total demand increases by 3.1 per cent. and building activity rises by 36 per cent. Between years 9 and 10, total demand decreases by only 4.5 per cent., yet building activity is cut to one tenth of its previous level.

Column VII brings out, by contrast, the influence of the extreme durability of housing in causing these exaggerated fluctuations in the level of current production. Here demand for a less durable asset, such as a car, is examined. Again each of the original families is assumed to demand the use of a car each year. A shorter life of about eight years is assumed, however, and also a higher rate of repair, requiring altogether the equivalent of 6.5 million new cars a year. Demand for current production of cars shows roughly the same absolute fluctuations as in the case of houses but, because a higher basic level of activity is maintained to meet higher replacements and repairs, relative fluctuations are much smaller.

Suppose for instance that each year each family allocates from its income \$500 to flour, \$500 to housing and \$500 to car purchase; that flour is replaced each year; that replacements and repairs for houses and cars proceed as assumed above; that annual expenditure by a consumer of \$500 on housing calls for the erection and maintenance of a house originally costing \$6,000; and that similar expenditure on cars calls for the production and maintenance of a car costing \$1,200. Then it can be seen from column I that the demand for activity to produce flour ranges during the period from \$17,700 million in year 1 (35.4 million times \$500) to \$23,500 million in year 9. In the case of cars, as can be seen from column VII, the same aggregate annual expenditure gives rise to a demand for activity to produce cars which ranges from \$3,600 million in year 12 (3 million times \$1,200) to \$12,600 million in year 3. But in the case of housing, as can be seen from column VI, the same aggregate annual expenditure gives rise to a demand for activity to produce houses which ranges from \$1,800 million in years 10 to 14 (300,000 times \$6,000) to \$31,200 million in year 3.

Columns I, VI, and VII represent the demand during a period of population change for, respectively, flour, houses and cars, assuming that each family spends each year a constant amount on food, on houses and on cars and that the supply

price of each is unchanged. The differences in the degree of fluctuation in each column are caused solely by the different rates of replacement for each product. The differences in the fluctuations are brought out clearly in table XI, where each column is converted into a series of index numbers, the base in each case being the average demand over the whole period for the relevant commodity.

TABLE XI. INDEX NUMBERS OF DEMAND FOR HOUSING ACTIVITY COMPARED WITH DEMAND FOR PRODUCTION OF LESS DURABLE GOODS (HYPOTHETICAL)

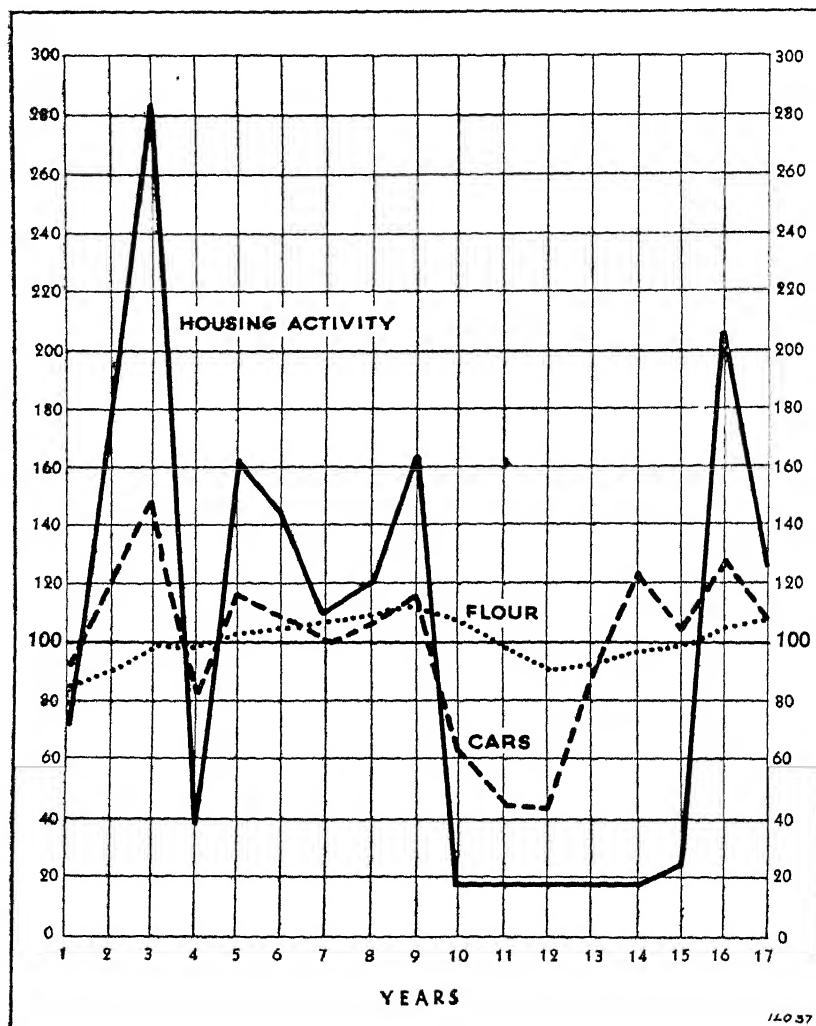
(Base. in each case average demand for entire period = 100)

Year	I	II	III
	Demand for production of flour	Demand for production of cars	Demand for production of houses
1	85	92	71
2	90	121	185
3	99	149	283
4	98	84	38
5	102	116	163
6	105	109	136
7	106	102	109
8	109	105	119
9	113	116	163
10	108	63	16
11	99	44	16
12	91	43	16
13	92	92	16
14	97	122	16
15	99	104	22
16	105	128	206
17	107	107	125

It should be emphasised that the only variables in this table are the number of families assumed to be demanding the various goods in each year and the rates of replacement for the various goods. Each family is assumed to require, each year, the same quantity of the three different types of goods. The table shows the combined effects on the three different types of production allowing for an annually changing number of families and differential rates of replacement for the three different types of goods. The chart demonstrates graphically the resultant differences in fluctuations in demand, with demand for housing activity fluctuating much more extremely than either of the other two demands.

INDEX NUMBERS OF DEMAND FOR HOUSING ACTIVITY COMPARED
WITH DEMAND FOR PRODUCTION OF LESS DURABLE GOODS

(Based on table XI)

(Base: in each case average demand for commodity in question over
whole period = 100)

THE ROLE OF EXPECTATIONS

The demand for housing activity implicit in the total demand for houses is therefore by its nature likely to be extremely irregular. But the way in which decisions to demand houses are made is likely still further to magnify this irregularity. The house which is the product of building activity lasts for many years. Its purchase represents a substantial capital expenditure involving either the forgoing of annual interest (if the expenditure is made out of accumulated capital) or the making of instalment payments over many years. The owner-occupier will want, before he purchases, to be assured that he can afford to forgo interest or to make these payments over the length of time involved. The investor who proposes to rent his house to a series of tenants will want, before he purchases, to be assured that he will recover from the tenants, during the letting life of the house, enough to compensate him (allowing for periods of vacancy) for the price he has to pay for the house and the trouble involved in engaging in the business of house-letting. Decisions to buy houses in any one year will be made, therefore, with reference not to the current ascertainable expenditure which families are prepared to make on housing but to the expenditure which families may be expected to be able and willing to make during the life of the house. Owners will also want to make estimates of the price they could receive by selling the house at any time during its life, in case they are forced or wish to realise the capital value of their asset.

Decisions as to whether or not to demand houses at a particular time and what price to pay for them will depend therefore on hazardous expectations as to what is likely to happen over the succeeding forty years or so. In fact, of course, decisions will be made primarily with reference to what is happening at the time, in the expectation that the current state of affairs will last indefinitely, subject to such modifications as can be fairly certainly foreseen in the near and more distant future. As a result, current trends are likely to be exaggerated. A rising trend of demand for houses at a particular time is likely to be interpreted optimistically, a falling trend pessimistically. This swing from optimism to pessimism in expectation is likely to be even greater in the housing industry because of the extremely long life of the asset than it is in most investment industries.

This tendency is still further exaggerated by the fact that a great part of building activity is done at the order not of

owner-occupiers and investors but of speculative builders who have houses built, not for their own use or investment, but to sell, at a profit, to owner-occupiers and investors. Just as the homogeneity of the service provided by houses makes them suitable objects for letting, so it makes them suitable objects for speculative building. In a rising market, the speculative builder sees his chance for expanding sales and orders the erection of large numbers of houses. As a result, the expanding demand is quickly met and then over-supplied. A break comes in the market, over-optimistic expectations turn to over-pessimistic expectations. The speculative builder, unwilling to hold houses except for quick sale, gets out of the market as fast as he can and stays out until it is clear that the original over-production has been absorbed and a new expansion is on the way.

The extreme irregularities inherent in the demand for building activity are therefore still further aggravated. Once an expansion is under way, owners and speculative builders tend to anticipate and bring it quickly to its own exhaustion, whereafter building activity collapses earlier than it would have done without this excessive optimism. It then languishes until an expansion of demand has proceeded far enough to justify a reversal of pessimism. Recently there has been a tendency for more and more houses to be supplied by speculative builders. This is likely to accentuate the irregularity of the housing industry. As long as owners order houses direct from building contractors, there will always be some activity in the building of new houses, even in serious depressions. But as the speculative builder becomes more important, building is likely to be concentrated more and more into boom periods and less and less in depression periods.

Influence of Factors Affecting the Supply of Housing on the Irregularity of Building Activity

In the first place, the supply of houses is elastic in depression and inelastic in boom. The substance of this point has already been made in considering the factors affecting demand. In a depression there is a decline in the number of families and in the amount each is prepared to spend on housing. The fact that a house can hold a widely varying number of people and that its repair, alteration and demolition can be postponed over a fairly long period means that the reduced demand can be met by a supply which in effect expands substantially without any building activity. When a family decides to get some extra

income by letting rooms to another family, what was previously one house becomes in effect two houses. Similarly, when employment and income rise, families decide they want separate houses, so that supply is immediately reduced to the extent that people decide to give up sharing their houses, while demand is as suddenly increased.

The war and post-war periods provide dramatic illustrations of this movement. Over many years, the number of families has steadily grown, followed by a rapid increase with the return of service personnel. Over and above this, many people have wanted to move to different localities, with the development of new industries and new trends in industrial and residential location. During the war building activity was heavily reduced because of the need to use building resources elsewhere. In addition, in many countries there was an extensive destruction of houses by enemy action. Most people have managed to get some sort of accommodation, though with much over-crowding and inconvenience. But with the cessation of hostilities and the resumption of building activity, a tremendous pressure for new houses and for long-delayed repairs, alterations and demolitions has developed. It will obviously take many years and greatly expanded building resources to meet this demand. When it has been met, the prospect — unless appropriate remedial action is taken — is one of a severe slump in demand with heavy unemployment in the building industry, whose skilled resources may find it difficult to get employment elsewhere.

In the second place, the factors determining the cost of new houses have important effects on the irregularity of activity in the building industry. This has already been fully discussed in Chapter III and it is here necessary only to recall that land costs, building costs and mortgage rates of interest easily move upwards in a boom period when each small and well-organised section of the industry sees the opportunity to increase its returns.¹ On the other hand, when depression strikes the industry, each small section sees no advantage in reducing its prices and, moreover, each resorts to various devices for spreading the available work and demand for materials, thus substantially offsetting any reduction in prices that may be made. Costs therefore rise easily in a boom and fairly soon choke off expanding demand ; they fall slowly in a depression and make less effective whatever demand may be available. As a rule, building costs fall substantially only well after the depression

has struck, and when demand has fallen so low that reduced costs can have but little effect.

Another severe limiting factor on the building industry is the nature of the productive resources it needs. These are usually of a fairly specialised nature and of little use to other industries. In a boom, the industry can expand its resources but slowly. When depression comes, it is left with large resources of workers and productive capacity which cannot easily find alternative uses. However, by the time the depression in the building industry is ending, many of the workers will have finally moved out into other industries (it has been noted earlier that the building industry is likely to recover later than other industries because of the slowness with which optimism revives in long-term expectations). The industry therefore finds that its labour resources have been largely dissipated, so that its expansion is hampered. On the other hand, there is likely to be substantial surplus capacity available in building materials industries, which can expand fairly readily in response to increased demand.

Factors on the supply side thus have somewhat conflicting effects on the irregularity of building activity. The elasticity upwards of costs tends to cut off the peaks of booms. The inelasticity upwards of production resources tends to prolong the boom by restricting the amount that can be supplied in any period. On the other hand, the inelasticity downwards of costs tends to magnify depression in the building industry.

The incursion of commercial banks into housing finance, which appears to be developing in some countries, may also have the effect of adding to the irregularity of building activity. At a time of threatened financial difficulty, these banks must increase their liquidity as much as possible and are therefore apt to withdraw temporarily as much as possible from the finance of housing, so reducing still further the possibility of carrying on house building in the depression.

Building Activity and the Trade Cycle

There is therefore ample explanation for the extremely wide fluctuations that occur in housing activity. The demand for houses is in any case unstable; the way in which this demand is translated into a demand for building activity results in an enormous magnification of that instability; and the factors determining the costs of building tend, particularly in depression, to increase the instability still further.

There has been extensive discussion of the nature of the relationship between fluctuations in building activity and fluctuations in general activity, with investigators unable to arrive at any finality in their conclusions. On the one hand, a depression in general activity is clearly likely to have a depressing effect on the demand for houses by reducing the number of families who demand separate accommodation and the amount each is prepared to spend on housing. Further, a general depression is likely to affect expectations about the future, and these are of great importance in determining building activity. Similarly, a general revival is likely to have a stimulating effect on building activity.

On the other hand, there are special determinants of building activity which operate independently of the general level of activity. Demographic factors may bring about an increase in the demand for houses through an increase in the number of families, despite the offsetting effects of a depression. A serious shortage of houses, entailing an underlying pressure for building activity, may persist through a general depression, as is likely in at least some countries in the present post-war period even after the boom resulting from other accumulated demands has exhausted itself. Shifts in location of industry and new developments in transport may occur in a depression and require building activity. Moreover, the building that is necessary as a consequence of a general industrial development takes a long time to be completed and may still be going on despite a depression in other activities. Similarly, there might well be a severe depression in building activity in face of a substantial boom in other activity. This is particularly likely to occur where a shift in location of industries has occurred during a depression, requiring substantial building activity. When industry in general recovers, most of the extra housing will already have been supplied and the building industry will not share in the boom and may even suffer a depression.

Certainly the building industry is of such great importance in total investment activity, which is itself of vital significance in determining the level of general activity, that movements in building activity will have very substantial effects on the level of activity generally. Some investigators even go so far as to claim a counter-cyclical influence for building activity. They base this on the fact that rents particularly are comparatively "sticky", both upwards and downwards, so that the upward movement of costs in a boom damps down a building boom and the downward movement of costs in a depression encourages

building. Moreover, investment in housing may become more attractive in a depression than industrial investment. Income from housing investment depends not on the vagaries of a particular industry but on the ability of tenants to pay rent. Moreover, the value of house-property, depending as it does more on the size of the population and its habits than on the tastes and immediate income of its consumers, is less likely to be subject to extreme fluctuations.¹

Extensive investigations have been made into the building cycle in the United States and it is well established that the major cycle there is a comparatively long one of 15-20 years, embracing two business cycles; that is, every second business depression tends to coincide with a building depression and therefore to be particularly severe.² This phenomenon does not appear to have been established for other countries, but investigations elsewhere have been much less extensive.

The truth would appear to be simply that building and business cycles have some independent causes, and can also act at times to moderate and at other times to intensify each other according to which independent causes are at work. There are features peculiar to the building industry which make it subject to extreme fluctuations. These may be intensified or offset by the level of activity generally. The level of activity in the building industry will be of great significance in determining the level of activity generally; but there are other important factors contributing to the determination of the general level of activity and these may supplement or offset the influence of the building industry.

Perhaps the most interesting illustration of this inter-relationship is the building boom which developed in the United Kingdom during the 'thirties, and which is claimed to have been a main factor responsible for leading that economy out of depression.³ In the first place, although the depression was severe, it was largely confined in its effect on employment to the lower income groups. The employment, and to that extent the incomes, of the higher income groups, from which demand for owner-occupied houses and for new rental-houses mainly

¹ Cf. Marian BOWLEY · "Fluctuations in House Building and the Trade Cycle", in *Review of Economic Studies*, Vol. IV, 1936-1937, pp. 170-171.

² See, for example, the references cited at the beginning of Chapter IV.

³ Cf. W. F. STOLPER · "British Monetary Policy and the Housing Boom", *loc. cit.*, and Marian BOWLEY, *loc. cit.*, pp. 167 *et seq.*

arises, were much less seriously affected. Moreover, there was a substantial movement in the terms of foreign trade in favour of the United Kingdom, which was importing foods and raw materials highly elastic in price and exporting manufactured goods which were much less so. This helped to bolster up the real income of the economy. Secondly, the housing shortage precipitated by the first World War was still acute, so that there was an underlying pressure for continued building activity and an upward pressure on prices and rents. Thirdly, there was a substantial change in the location of population owing to the severe depression of heavy industries mainly in the north and west and the development of new industries in the south. The people who moved had to have housing, which was a first charge on their incomes, however depressed. Underlying long-term factors made for a sustained measure of building activity — notably the declining availability of domestic servants, an important factor where so many higher income group houses were designed on the assumption of plentiful domestic assistance ; the substantial change in the average size of families ; the development of many attractive innovations in new housing ; and the strong public pressure for slum clearance, reduction of overcrowding and improvement of housing standards generally. Finally, new houses built to rent were not subject to rent control and were therefore more attractive to investors than existing houses, the rents of which were mostly controlled.

On the supply side, there were also substantial contributing factors. In the first place, costs did fall, although the fall took place rather late and would appear to have helped to intensify and prolong an established boom rather than to have initiated an expansion. Secondly, there had been, under the stimulus of Government policy in the 'twenties, a substantial expansion of the labour force, so that there were plentiful resources available and more could fairly easily be recruited on account of the depressed condition of other industries. Thirdly, the general structure of interest rates fell substantially and this eventually resulted in a fall in mortgage rates of interest, of great significance in determining the cost of buying and renting a home. Finally, thanks in part to the low rate of interest available for other investments, and probably most important of the factors on the supply side, there were ample funds available, particularly through building societies, to finance the purchase of homes. Building societies accept short-term deposits and lend at long-term. The liquidity they offered to the investor was particularly attractive in that period of uncertainty. Moreover, other

industries were seriously depressed and housing offered more attractive prospects as an investment. Investment of capital abroad was closely restricted, and the imposition of tariffs and the abandonment of the gold standard permitted a moderately inflationary policy, particularly in the reduction of interest rates, to be pursued at home without fear of possible adverse reactions on the balance of trade.

This experience of the United Kingdom demonstrates vividly how a peculiar combination of conditions can lead to a building boom first arising in the midst of a depression and finally helping to lead the whole economy out of the depression. It contrasts sharply with the course of events in the United States, which followed a much more familiar pattern. A building boom developed rapidly after the war and reached a high peak as early as 1925, when total residential construction reached \$4,800 million compared with \$1,900 million in 1919. It then fell steadily and with increasing rapidity to only \$500 million in 1933 and recovered slowly to \$2,800 million in 1940. Building activity in the United States clearly led the economy into depression and then lagged badly behind while the rest of the economy recovered.

Inadequacy of Housing Activity

Most of what has been said concerning the irregularity of housing activity also contributes to the inadequacy of housing activity. Wide fluctuations in an industry so important to welfare make it impossible for housing to play adequately its proper role in society. The industry is fraught with uncertainty and risk and its costs are correspondingly high. The housing market is by no means perfect. It is difficult for the consumer to find out what is offering. The supply of houses for rent tends in many countries to be chronically inadequate to meet the needs of the many people who for various reasons do not want or cannot afford to buy a house. Prices of houses and of land rise easily and fall slowly, sustained largely by the widespread conventional belief in the value of houses as an investment. As in the case of the rate of interest, people have an "idea" of what the long-term value of real property should be and they will revise this idea downwards only with great reluctance. This adds a further obstacle to the reduction of the cost of housing to levels within the reach of the mass of consumers.

CHAPTER VI

CONTENT OF HOUSING POLICY : PART I

The central aim of housing policy should be the provision of better housing for all whose welfare would be improved more by better housing than by an improvement in other aspects of their standard of living ¹. Public policy in the field of housing should be directed consciously towards the achievement of this aim ; and the results of private business decisions may also be judged by the extent to which they contribute to this achievement. The amount and quality of housing required by this criterion will expand continuously as a community grows wealthier and raises its general standard of living. It should be the aim of housing policy to ensure that the improvement in the amount and quality of housing appropriate to each successive level of economic development is in fact achieved. If more or less than the appropriate level is reached, a better allocation of resources would increase the community's welfare.

The most obvious case of misallocation of resources occurs where some resources are left unemployed. Production of all goods and services, including housing, should be carried on up to the limit set by the full employment of all resources seeking employment, at the intensity of employment desired by the

¹ This basic statement should be amplified in two ways. In the first place, it is not a question of some improvement in housing or no improvement in housing, but rather of a little more improvement in housing or a little less. Improvement of other aspects of living standards will always be going on simultaneously with improvement of housing standards. Finally, however, a decision will have to be made as to whether total welfare would be increased more by the use of available resources to achieve a further small improvement in housing standards or a further small improvement in other aspects of living standards. This brings up the second point, which is that this decision must be made with reference to the nature of available resources. Would the resources that are available add more to total welfare by being used to increase the supply of houses or of other goods and services ? This second point is important when allowance is made for the varying mobility of different resources.

working population.¹ However, even if full employment is being maintained, there can still be a serious waste of resources if too many houses are being produced at the expense of other goods and services more urgently wanted by the community, or vice versa.

Owing to the specialised nature of resources required under the conditions of modern production, there is a real danger that the need for high and stable employment in general will come to be interpreted as a need for stable employment in particular industries. Even if the economy in general offers more jobs than there are workers available, the specialised craftsman, who is of such importance in the building industry and who is not likely to be skilled at many alternative occupations, may object strongly to submitting himself to the trouble and expense of acquiring proficiency in another occupation and may in any case resent having to change to another occupation. His resistance will be strengthened if it appears to him probable that the decline in demand for his product, which would make it desirable for him to change to another occupation, is likely to be temporary; and usually any decline in demand will in the first place be regarded as temporary, and will have to persist for a long time before it is accepted as permanent.

Yet maximisation of real income requires not only that employment should be maintained at a high and stable level, but also that resources should move freely from industry to industry in response to changes in public demand. If full employment is interpreted as meaning stable employment in each industry, a costly and undesirable element of rigidity will be introduced into the economy. On the other hand, flexibility cannot continue to be achieved, as it has been in the past, at the cost of chronic fluctuations in the general level of employment.

A compromise between these two aims of stable employment and flexible production is particularly necessary in the case of building, where fluctuations in the level of activity have been so great. Certainly the extreme fluctuations to which the industry has been subject have been caused primarily by the defects of an economic system in which, in particular, variations in employment have caused variations in the demand for

¹ It should be noted that resources may be over-employed as well as under-employed. Beyond a certain intensity of employment, the community will derive more enjoyment from extra leisure than from the extra goods and services they might instead produce. At this stage it would be preferable to reduce working hours rather than, say, to seek to improve housing standards.

houses, and in which speculation has accentuated the resultant fluctuations in housing activity. The fluctuations in the level of activity that would still be required in an economy which maintained both full employment and an ideal allocation of resources would be much smaller. However, the fact cannot be denied that, even with the best planning and management of both the housing industry and of the economy in general, some fluctuations in the demand for housing activity are likely to remain. Fluctuations in an industry using such specialised resources are difficult to offset by variations in other sections of the economy. Yet if they occur and are not offset, they will have multiplied effects on the demand for and production of all other goods and services. It will be desirable, therefore, even at some sacrifice on the short-run view of the ideal allocation of resources, to maintain a sufficient degree of stability in the level of housing activity to prevent such fluctuations as remain from being a threat to the maintenance of stable employment generally.

If this industry is subject, in an abnormal degree, to irreducible fluctuations in its demand, then it is only reasonable that the man engaged in it should receive some special protection. If such protection is not given, its workers will, from time to time, be faced with unemployment, a need to accept retraining in other skills and, in some cases, the later sacrifice of these newly acquired skills in order to return to building trades; employers will be faced with repeated fluctuations in the extent to which their productive capacity is used. If this situation continues, it will be impossible to increase the efficiency of the building industry and to prevent the maintenance of socially undesirable restrictive practices designed to spread the available output and to limit the entry of new employers and workers into the industry. These restrictive practices and inefficient methods of production in any case probably present a greater threat to the maximisation of real incomes and the ideal allocation of resources than would the maintenance of a degree of stability in the building industry sufficient to remove the need for these restrictive practices and to permit the adoption of more efficient methods.

Even if the maintenance of this degree of stability in the level of housing activity led to the building of houses that were not immediately wanted, it would have less serious effects than in other industries. The product of the industry is extremely durable and the service it provides is highly standardised. If for a time there was too much building in relation to

demand, the excess output could eventually be used and might in any case be offset immediately by an increased rate of demolition of substandard houses. Similarly, if for a time there were too little building in relation to demand, the rate of demolitions could be held back and there would be, at worst, a temporary increase in "doubling up" and overcrowding.

The twin aims of housing policy should be, then, the improvement of the standard of housing and the maintenance of a greater degree of stability in the level of housing activity. What should be the main features of a policy designed to achieve these aims?

Reduction in costs. The costs both of building and of buying or renting a house are subject to influences which tend to make them higher than they need be.¹ The incidence of imperfect competition and of low productivity in the production and financing of houses is abnormal. There is room for reduction in the cost of labour and materials, and for improvement in methods of production. Efforts should be made in appropriate circumstances to reduce mortgage rates of interest, to improve methods of financing and to revise the structure of taxation in such a way as to make it weigh less heavily on the houses of low income groups.

Building to the market. The supply of houses coming on the market should be in conformity with the nature of the demand for houses. In most countries, annual additions to the supply of houses have tended to be mainly for upper income groups, the needs of lower-income groups being met by the "filtering-down" of houses previously occupied by higher income groups and by the retention on the market for too long of depreciated dwellings which should have been demolished. Within proper limits, the process of filtering down is no doubt inevitable and desirable, but the supply of houses to lower income groups should come much more than it has in the past from new houses designed for their needs.

Elimination of slums and overcrowding. As fast as supplies of alternative accommodation become available, substandard housing should be eliminated by mandatory public regulation, which is the only way of achieving this elimination. Slums offer a profitable return to owners and, however unsatisfactory, are usually the only cheap housing available to most low income groups. The definition of slums and of overcrowding should be

¹ See Chapter III.

progressively raised as the community becomes richer and can afford better quality housing.

Planning for housing. Such housing activity as does take place can be most effective if carried out in conformity with over-all plans drawn up for the future development of neighbourhoods, towns and regions within a country. Plans for the acquisition of land and the control of land use and land values should also be made, in conformity with these developmental plans. The plans would have to be based on careful enquiry into and anticipation of future economic and social developments. Another aspect of planning should be covered by the establishment of machinery to ascertain the amount of building activity going on at any time and likely to be undertaken in the near future, the supply of labour and materials, the movement of costs, and so on. Under this heading might also be included measures to increase the mobility of workers in the building industry.

Improvement of real incomes available for spending on housing. This will have two aspects. In the first place, the achievement of full employment and progressively greater productivity, and the process of redistribution of incomes, will steadily raise the community's real income, permitting more to be spent on housing. Secondly, the incomes of those who are still unable to meet the costs of adequate housing may be supplemented by special housing subsidies of one sort or another.

Stabilisation of Housing Activity

Stabilisation of the output of the building industry is really the key to the whole housing policy. It is essential to the achievement of the central aim of housing policy. the provision of more and better housing. Moreover, the achievement of greater stability will in itself help to maintain stability in the building industry. Thus, for instance, it has been demonstrated in Chapter III that one of the basic causes of low productivity in the building industry is the instability of the level of output and employment in the industry. A reduction in building costs is therefore largely dependent on the stabilisation of building and, in turn, the reduction of costs will permit an enlargement and greater stabilisation of the building industry. Similarly, it has been shown in Chapter II that the building industry is of vital significance to the general level of employment. The level of employment and income in general can

hardly be stabilised without a substantial degree of stability in the building industry. In turn, the stabilisation of incomes generally will contribute greatly to the stabilisation of demand for building activity.

Other aspects of housing policy should therefore be directed especially to stabilising the building industry at as high a level of activity as can be afforded by the community in the light of the other things it wishes to achieve. A high level of activity will ensure, on the one hand, that the aim of more and better housing is being achieved as fast as possible and, on the other, that what inevitable fluctuations do remain will be small in relation to the normal level of activity. The clearance of slums, the elimination of overcrowding and the progressive raising of the standard of what is considered adequate housing, combined with the putting of adequate purchasing power into the hands of the people who have hitherto been forced to live in substandard housing, can bring a new and vast volume of demand into the market for housing. Even more significant is the fact that these instruments can all be varied fairly easily. If a slump threatens in the building industry, the standard by which substandard housing is determined can be raised. More houses will then be needed, and this need can be made into effective demand provided costs are kept down, incomes are kept up, and subsidies are granted and liberal credit is made available on the scale necessary. The avoidance of a slump in the building industry will itself contribute to keeping down building costs as compared with incomes and to maintaining high and stable employment and incomes throughout the economy. It will thereby reduce the expenditure necessary for subsidies.

A continuing threat to stability in the building industry is the likelihood of substantial shifts of industrial production from one location to another, leading to a housing boom to rehouse the shifted population, followed later by a slump when this new demand has been satisfied. Even this potentially difficult situation can be met within an effective housing policy. In the first place, the Government and the building industry can be kept informed, through planning and investigating agencies, of impending shifts. It should in each case be decided whether the shift is desirable from the community's point of view, or whether the advantages to private industries from the shift are outweighed by the disadvantages to the community in scrapping substantial capital equipment in the form of houses, schools, roads and other public utilities. If the shift is found to be undesirable, it should be made economically attractive for

the industries concerned to stay in their existing locations, or for industries by which they are being replaced in the market to establish themselves in existing centres of population. The threatened boom and slump in housing can then be avoided. If, on the other hand, the shift appears on balance desirable, as it will often be in a flexible and progressive economy, the Government should take appropriate steps to minimise the disturbing effects of the shift. This should not present insuperable difficulties. In the first place, the more efficiently the shift is anticipated, the more can it be spread out over a period of time and provided for in advance and the less will be the impact at any one time on building and other construction industries affected. Secondly, the physical strain on resources can be eased by a slackening of building and other construction throughout the rest of the economy, to permit a concentration of resources thus released in the centre where accelerated construction, including housing, is required. The new development will in effect be receiving priority over construction in other centres. The slackening in those other centres can be made possible by, for instance, the slowing down of slum clearance and the postponement of less urgent construction projects. It should be noted that the farther slum clearance and raising of housing standards have already progressed throughout the economy, the easier and the less undesirable will be temporary halts in their continued progress. Thirdly, this immediately suggests the need for action by Governments, trade unions and employers, in co-operation, to increase the mobility within the country of building resources, particularly labour. Finally, where it is a question of a substantial shift of population, difficult financial problems may arise. Householders leaving one centre may find it impossible to sell except at heavily depreciated values and will be obliged to buy in the new centre at prices which will be subject to inflationary pressure. The inflationary pressure at the new centre can probably be controlled, and will be the more easily controlled, the more efficient is the planning and timing of the shift, the concentration of resources for production of houses at the new centre, and the public policy for controlling land values. The depreciation of values in the old centre is, however, something that cannot be avoided if it is no longer a suitable centre for production. Since the shift would have been decided, according to this proposal, by a public authority, the individual families affected should not themselves have to bear the loss involved. Flexibility of production is an important asset to the community and the community should be

prepared to meet the consequent costs. One of the important factors contributing to immobility of labour is the natural unwillingness of workers to accept a loss on a house bought at great sacrifice. If the community decides that efficiency demands a shift in a centre of production, it should itself be prepared to meet a substantial part of the costs of that shift.

The housing policy which has been outlined is essentially one which must be carried out as a whole. The liberalisation of credit and the payment of subsidies, to which Governments have mainly confined their activity in the past, are not enough. They may even do harm since, with the existing structure of the building industry, they are likely to be largely dissipated in driving up costs and prices, particularly when, as at present, purchasing power for houses is excessive in relation to the supply of houses at reasonable prices. Public financial assistance will merely add to this excess purchasing power and will not help to solve the fundamental problem of getting more houses built at reasonable prices. Slum clearance, in particular, cannot be achieved without an over-all housing policy — it would be inhuman to demolish existing houses, however bad, unless alternative accommodation at comparable cost were available for slum-dwellers to move into. Subsidies, slum clearance and cost reductions should accompany a vigorous expansion of building activity, under the auspices of whatever combination of public and private building is likely to produce the best result.

The need for such a housing policy is particularly acute at the present time. In any country which fails to take appropriate action the strong pressure of purchasing power will at best produce a typical housing boom, with costs and prices rising so rapidly that demand will in any case be choked off fairly soon. Houses will be built only for the higher income groups who can afford the inflated prices. The only supply to lower income groups will be the depreciated houses that filter down from the higher income groups. This will not make any significant impression on the housing standards of the community as a whole. The numerous small groups of employers and workers throughout the industry, who will seek to raise their prices to take advantage of the boom, will take a long time to reduce them again. Building activity will languish despite a great unsatisfied need for housing.

In contrast with this is the situation in which a Government arranges liberal credit for lower income groups and, when necessary, grants subsidies on good houses built cheaply by

itself and by any private builder who can build houses cheaply for these groups ; it controls the allocation of building resources to ensure a proper proportion of houses being built for the lower-income groups ; by guaranteeing continued stability of employment, it encourages the trade unions to prevent the development of restrictive practices, to reduce labour costs without cutting workers' incomes, and to admit substantial numbers of new entrants to the building trades , it encourages producers of building materials and building contractors to prevent the development of restrictive practices and improve their methods of production ; by experimental building stations and revision of building codes ; it develops and promotes the use of new materials and methods ; by forcing the demolition of substandard housing as fast as such housing can be replaced by a high and stable level of building output, it guarantees a large and stable market for houses ; and it ensures, through appropriate planning, that houses are built where they are needed and will continue to be needed, and provides for any necessary shifts in existing population centres being achieved without disruptive effects on the building industry. With such measures, there will be real hope of stabilising the building industry and of raising it to the position where it can be of greater use and service to the community.

Building as a Counter-Cyclical Agent

Stability of output in the building industry has been proposed not as an end in itself but as being necessary in order to maintain the stability of employment in the economy generally, and to permit a reduction of costs in the building industry. On the other hand, Governments which have accepted responsibility for maintaining full employment are seeking avenues of expenditure which can be varied, under Government control, to offset fluctuations arising in other sections of the economy. These Governments will want to know whether housing activity is capable of being used as a "counter-cyclical" instrument. Some aspects of this problem have already been discussed, particularly in this chapter, from the point of view of the need for a greater level of stability in the building industry. There is, however, a question not only of whether fluctuations in the industry can be reduced so as to cause less disturbance to the industry itself and to the whole economy, but also of whether such fluctuations as remain can be made to occur at the times, at the places and in the directions which will best help to stabilise the economy generally.

At first sight, houses would appear to offer an ideal form of public investment for counter-cyclical purposes. The units are small; their construction can be started quickly, especially if over-all planning of housing development is maintained; the units can be completed quickly so that the investment can be easily tapered off if need be.¹ A demand for houses can be fairly easily created through slum clearance and subsidy policy and the demand can, moreover, be concentrated or spread out over as few or as many different places as may require a stimulation of employment. As has been pointed out earlier², in a slightly different context, even if more or less homes were built than were demanded, as a result of counter-cyclical policy, the effects would be less serious than in other industries whose products were less durable and less standardised in the service they provide.

From the point of view of resources used by the industry, it will be noted as a further advantage that, in most countries, materials for building are produced largely at home, so that only a small proportion of a Government's counter-cyclical expenditure would "leak" abroad, and that building offers employment to a wide variety of skilled and unskilled workers, giving it a distinct advantage over many other types of public works which employ, directly, mainly unskilled labour. Here, however, arises the main difficulty in developing housing as a counter-cyclical agent. As has been discussed earlier, housing activity relies heavily on highly specialised craftsmen. It will therefore be difficult to recruit new workers to permit a counter-cyclical expansion of housing, or to transfer workers into other industries when a contraction of housing would be called for. Some degree of mobility would exist, particularly in relation to other construction industries. This should be exploited to the full and if, thereby, the construction industry as a whole could be stabilised through Government policy, a great contribution would be made to the stability of employment generally. It is, however, doubtful if a significant counter-cyclical pressure could be exerted by housing policy alone, as long as production continues to require highly specialised craftsmen. However, the more the production of houses can be made

¹ See "Elapsed Time and Cost in Residential Construction", a report prepared by J. TOURIN for the Construction and Public Employment Division of the U.S. Bureau of Labor Statistics, published in *Monthly Labor Review*, Sept 1946. In 1929 and 1931, the average time taken to complete a house from the beginning of construction was 3 $\frac{1}{2}$ to 4 $\frac{1}{2}$ months. In March 1946 contractors estimated that 25 per cent. of "starts" would be completed in 3 months, 62.5 per cent. within 5 months, and 75 per cent. within 6 months.

² Page 105, above.

to depend on mechanisation and factory processes, as is discussed in the following chapter, the less specialised will be the labour required. If there is substantial progress made in this field, the suitability of housing for executing counter-cyclical policy will make it a promising field for action of this kind.

Public Authority and Private Enterprise

Under a housing policy of this nature, what will be the relative roles of public authority and private enterprise? No country is prepared to leave the housing problem entirely in the hands of private enterprise. A few countries will rely solely on public authority. Most will rely on varying combinations of the two. It is impossible to lay down general rules as to the exact division of responsibility that should be made. Various countries are at quite different stages of economic and social development, or have different political ideas. A different solution will be appropriate for each.

Many of the factors affecting housing are exclusively within the control of public authorities. Only Governments can determine, for instance, what is to be the nature of property taxation, particularly the rates imposed on houses and urban land. Governments or municipal authorities determine the content of building codes. They alone can enforce legislation designed to eliminate slums and overcrowding and can pay housing subsidies. Most Governments were already doing most of these things before the war. During two world wars, most have also extended their control over the rents and prices of houses.

These actions by Governments have not in the past been taken primarily to contribute to an effective housing policy. Rates have been determined solely from the point of view of raising revenue, building codes have been designed, at best, to protect public safety, slum clearance has been carried out only on a limited scale. Only a few countries have carried through for any length of time a consistent policy of subsidisation and, even there, the subsidies have at times been more effective in driving up prices and costs than in getting more and better houses built than would otherwise have been built. Finally, the wartime control of prices and rents of houses was necessarily designed to prevent an inflation of those values and not to raise the standard of housing, resources for which could not be afforded under wartime pressures.

The part which private enterprise is to play in housing activity in future should be determined by its ability, in co-

operation with any measure of public planning that is found necessary, to produce the types and quantities of houses needed at the lowest possible cost. Fluctuations in the demand for housing, arising from fluctuations in income and from changes in the number of families seeking houses in particular localities, are largely beyond the control of the building industry itself. But there is much that the industry can do towards increasing the efficiency of production methods in order to build for a much wider market.

If private enterprise can do this, Governments can confine themselves to over-all planning and to measures designed to stabilise total housing production, to reduce building costs which are beyond the control of private employers and to supplement the purchasing power of income groups which could not otherwise afford adequate housing. Actual building operations could be left to be carried on by private enterprise. Measures such as the reduction of interest rates, the payment of housing subsidies, the control of rents, the planning of local and regional development, and the enforcement of legislation designed to eliminate slums and prevent overcrowding, offer no threat in themselves to private enterprise in the building industry. On the contrary, they actually open up a market of a size and stability never before available to private enterprise.

However, the very fact that Governments will inevitably be so deeply involved in housing, both in devising suitable policies and in undertaking expenditures on subsidies, will make it all the more necessary for private enterprise to operate with maximum efficiency. The provision of good and cheap houses has become a real political issue, one of the things by which Governments are judged. Moreover, the degree of stability of employment in the building industry, more than in any other single industry, will determine the degree of stability of employment in general, probably the most vital political issue of all. Governments seeking to carry out a programme of public investment to stabilise employment could not leave housing out of that programme, unless the housing industry was already producing at a high and reasonably stable level. Governments spending a substantial proportion of their budgets on housing subsidies could not avoid taking over more and more responsibility for the actual building of houses, unless the industry was producing houses at the lowest possible cost and of the types wanted by the various consumers.

CHAPTER VII

CONTENT OF HOUSING POLICY : PART II

It would be profitless to attempt to suggest the detailed content of housing policy, which will inevitably differ greatly from country to country. There are, however, important economic aspects which should be considered by each country in deciding what form its housing policy should take and how it should be administered.

Reduction of Costs

COSTS OF CONSTRUCTION

If a consumer buys a hand-made carpet or radio, a tailored-to-measure suit or costume, he knows he is buying a product which will be of unusual quality or design. He does not expect it to be cheap. Most consumers can afford to spend little of their income on such products. They know that to make the best use of their income they must rely chiefly on efficiently mass-produced goods and services. Yet in spending on housing, which absorbs a substantial part of their income and which is usually the biggest single item of expenditure after food, they are buying the product of a largely handicraft industry. Unless they can afford a price which is too high for most incomes, they must therefore buy or rent housing which, if it is new and designed for purchasers of their income groups, has been produced with poor quality materials and construction, and in which the size and conveniences have been cut to reduce the price ; if it is second-hand, they will be buying products designed for somebody else and probably not at all suited to their needs, houses which have depreciated to values which are within their reach only because they are old, badly located or unrepaired. From the passage quoted on page 22 it will be seen that modern

industry provides at least efficiently, if not extensively, for all the important needs of the \$30-a-week man except in the field of housing.

What are the obstacles to the application of mass production techniques to housing production? Do lower income groups insist on individuality of design in their houses? The answer to this is to be found in any typical city, with its great blocks of housing, identical in design. In any case, with a finished product as large as a house and enjoying so large and widespread a market, there is ample room both for standardisation of parts on a scale sufficient to permit the optimum scale of production for any one part, and for a wide variety in the finally assembled product. There can be no objection to the mass production of houses on the grounds that the product must be unattractively standardised. If the difficulties and expense of transporting a completed mass-produced house from a factory to its site prove excessive, mass-produced parts can be assembled at the site. Moreover, if a large site can be subdivided and built up as one project, which is possible either in the case of an area that is being newly developed or in the case of a blighted or slum area that is being cleared and rebuilt, the assembly job should be sufficiently large to permit the adoption, at any rate in some degree, of efficient assembly-line techniques.

The obstacles to this sort of procedure are many but none of them appears insuperable. Perhaps one of the most important is that, for production of this type, heavy investment and a large administrative staff, involving heavy overhead expenses, are required and that the extreme instability of demand for housing makes such investment risky and unattractive. Here again the assurance of a much greater degree of stability in the housing market is an essential condition of success in housing policy. Given this condition, the fact that the industry is at present composed of a large number of small firms and speculative builders should present no fundamental difficulty. Most industries were originally in the same position and the small producers were gradually forced either to amalgamate and to enlarge their scale of operations or to go out of business, defeated by the greater efficiency of the large firm. Difficulties may also be created by producers of materials and parts refusing to sell to business men manufacturing under the new methods. This could be overcome partly by Governments preventing actions in restraint of trade, and partly by the new manufacturers producing their own materials and parts, many of which would in any case require to be manufactured under conditions dif-

ferent from those prevailing in the past. Similarly, in a modernised industry, there would be more reliance on factory operatives and less on skilled handicraftsmen. This is again a development which has characterised most modern industries, to the ultimate advantage both of consumers and of workers. Further difficulties may be created by out-of-date building codes which need to be amended in order to permit the use of raw materials adaptable to mass production techniques.

In any case, mass production will presumably be a comparatively slow-growing factor in the housing market. In the first instance, it might be introduced to speed up the building of homes for lower income groups, the replacement of slum dwellings which would otherwise have continued in existence, and the reduction of the abnormal shortage of housing which has developed as a result of the suspension of building during the war.¹ The main normal demand for the product of the building trades — the building of new houses for the higher-income groups, and the repair, maintenance and conversion of existing houses — would not be much affected by these developments. For some years, there would be ample room in the housing market for the products both of mass production and of traditional methods of home-building. Eventually if mass production succeeds in building good, attractive and economical homes, it may be expected to encroach more and more on the higher-income market. Only then will the position of the building industry as it exists today be threatened. In any case, some quite substantial market for houses built by traditional methods should always remain.

In the interval, there is time to make suitable arrangements for meeting the difficulties involved in this transition from one form of production to another. Many building tradesmen may respond readily to the opportunity to receive retraining at Government expense in the techniques needed for the new type of production. The recruitment of new entrants to the building trades could be so organised as to adjust the labour force to the expected future demand for each type of labour. Moreover, the fact that the transition would be achieved in economies in which Governments have assumed responsibility for the maintenance of full employment would remove most of the difficulties and social injustices which have characterised

¹ For an interesting account of the experience of two firms which have adopted mass-production methods in the United States see "The Industry Capitalism Forgot", in *Fortune* (New York), Aug 1947, pp. 61 *et seq.*

industrialisation and the decline of handicraft industries in the past. It should be noted that the rapid and substantial expansion that is being sought in most countries in the building industry labour force now and over the next few years, makes it desirable that new industrial methods should be developed rapidly so that as many as possible of the new recruits may be trained to the new skills rather than to the traditional ones.

There is no reason why this development of new methods of production should not take place, as it has in most industries, under the auspices of private enterprise. Clearly Governments will have an important part to play in assuring to producers a large and steady market and in contributing to a solution of the transitional difficulties that may be experienced by building contractors, by trade unions or by producers of building materials. Granted this background of planning, it would, however, be reasonable to assume in the first instance that competing producers would be more efficient at building the actual houses than would Government departments which have to operate under different conditions. However, this is only an assumption and should constantly be tested against performance. Publicly operated experimental building stations¹ can maintain continuous research into new materials and methods of production, making their results known to the building trades. If there is any reason for dissatisfaction with the performance of private industry, Governments can also undertake direct building operations to establish minimum costs for efficient building of good, cheap houses.

The possible scope for such action is indicated by the experience of the United States Housing Authority, where cost of construction per dwelling was substantially less than the average cost of similar housing produced by private enterprises.

Costs of Housing²

	United States Housing Authority	Private
Net construction costs . . .	\$2,720	\$3,601
Over-all cost of new housing . . .	\$4,307	\$5,332

¹ The Australian Commonwealth Government, for instance, has established an experimental building station.

² N STRAUSS, *op. cit.*, pp. 99-100. The figures quoted for public housing are the average cost per dwelling unit of all the dwelling units comprised in the first 399 projects (well over 100,000 dwelling units) erected by local authorities under the U.S.H.A. programme. The figures for private housing are the average costs per dwelling unit of all new houses erected with the aid of F.H.A. insurance in the period

Individual ownership of land and of existing buildings may stand in the way of the development of large-scale housing projects. Only Government action can in these circumstances force present owners to permit their land to be used, at reasonable prices, for the efficient building of houses in the places where they are needed ; and to demolish buildings which, however profitable, provide substandard housing.

Similarly, where building codes prevent or hamper the introduction of new methods of production and of new materials, they should be revised by the Governments or municipal authorities concerned. It is clearly desirable that there should be public provision for ensuring a minimum standard of performance from buildings and their components ; it is inevitable also that these standards should vary to some extent according to the different circumstances of different localities. But there is no need for a detailed list of permissible and prohibited materials, or for the extravagant variety in detail which at present characterises local building codes. Various materials and methods of production could be tested in the factories where they are made, or at some central testing station ; their performance could be certified and individual builders could then easily satisfy themselves as to whether particular materials and methods conformed with the requirements of their local codes.

So far, reduction of building costs has been discussed in terms of a drastic revolution in methods of production. This will almost certainly take much time to bring about and, in the end, it may even turn out that the extent to which any such revolution can be effected is limited, even if the experiment is carried out with energy, enthusiasm and serious intention.¹

1938 through 1940. Strauss writes (p. 100) : " This analysis of the cost of public housing and private housing has been criticised on the ground that the figures for private enterprise include also houses built for families in higher-income brackets. However, the degree to which the average cost of private housing is increased by this factor is more than offset by two factors which tend to raise the average cost of public housing. The first is that public housing has been built by labor which, according to the provisions of law, is paid the prevailing scale of wages as certified by the United States Department of Labor, whereas much of the private housing is built by labor paid at a lower rate. The second is that all housing erected under the U.S.H.A. program has been designed for a life of at least sixty years and the specifications provide for durable materials throughout, while housing built by private enterprise, with or without F.H.A. insurance, is rarely constructed with a view to so long a useful life."

¹ For comment on this aspect, see M. L. COLEAN : " Housing — An Industrial Opportunity ", in *International Labour Review*, Feb. 1944, p. 160.

In the meantime, however, there is ample room for improvement even with the existing methods of production and organisation of labour and industry. Standardisation of parts has already made substantial progress in achieving economies both in production and in distribution, but it can be carried much further. Its development does not necessarily require amalgamation of existing producers, but it does require co-ordination and agreement between producers and consultation by them with builders and architects. Here again, so many different individuals are involved that almost certainly Government action, and possibly competition from Government enterprises, will be required to persuade the parties concerned to come together, to reach agreement, and to make the relatively minor modifications in their methods necessary to attain a greater degree of standardisation of parts.

As an indication of the savings which might be achieved through standardisation of dimensions and sizes, steel stairs bought in quantities for the Clairton Colonial Village project near Pittsburgh cost \$22 per flight in contrast with the estimate made by the manufacturer of \$75 for one individual flight. This type of standardisation has no effect whatsoever upon appearance or utility. It has been clearly demonstrated by the Modular Service Association and by the Homasote Co. that any number of house plans and styles can be designed upon modular dimensions, using 4 inches as the smallest unit of measurement instead of fractions (of inches) as at present. From actual experience in directing the construction of a large number of houses, the Homasote Co. estimates that modular design has resulted in a net saving of approximately 10 per cent. The ultimate savings through standardisation would undoubtedly be considerably greater upon its application throughout the building industry to both materials and architectural dimensions. Room heights, for example, could be standardised, permitting mass production of stairways and wall panels. Room lengths and widths could be in multiples of a standard unit, permitting the use of larger units of material than bricks.¹

The other main cause of abnormally high cost in the building industries is the prevalence of restrictive practices. It has already been emphasised that Government action to ensure much greater stability in the future is essential to modification of these practices.

Another factor that has contributed to high costs in construction has been the extent to which steady output has been hampered by seasonal conditions. This has resulted, for

¹ R. Harold DENTON, *loc. cit.*, pp. 138-139.

instance, in high wage rates, needed to produce annual incomes that are not abnormally high. The more houses are mass-produced in factories, the less important will this factor be. Moreover, even with traditional methods of production, various methods are being developed for permitting a better maintenance of building activity than has been possible in the past.¹ Instability of employment in the building industry has led to the movement for a guaranteed weekly wage, and, where possible, a guaranteed annual wage. It is claimed that this would contribute greatly to the workers' sense of security and, provided a nearer approach to stability of operations was achieved, would permit a significant reduction of labour costs at the same time as ensuring to building workers a reasonable and steady income.

Costs of Financing

Government intervention in the field of housing finance is more familiar and will provoke less opposition. During the war, particularly, most Governments used their power to control the money market to effect a substantial reduction in the long-term rate of interest on Government securities, and they clearly intend at least at present to keep this rate low. There is no positive evidence as yet that it is so low as to be causing an undesirable diversion of resources from production for current consumption to production of durable goods. These low interest rates will permit low mortgage rates of interest. Encouragement of building societies and co-operative credit institutions, and the establishment and extension of Government mortgage institutions, can bring cheap finance for the purchase of homes to a much wider group of consumers. Various types of public guarantees, partial or complete, of mortgage interest payments can permit a narrowing of the margin between the rate at which Governments can borrow and that at which home-purchasers can borrow, in fact, can reduce the margin very nearly to the minimum required to cover costs of collection. It is important, moreover, to ensure, where Governments do guarantee interest payments, that the rates charged on mortgages are reduced in accordance with the reduced risk factor. Otherwise, lenders will be lending on security as good as Government bonds, but at higher rates of interest. Collection costs

¹ See, for instance, H. FELDMAN : *Stabilising Jobs and Wages* (New York, Harper and Bros., 1940), pp. 277-284 and *passim*

themselves should also be capable of reduction. The maintenance of full employment and a high level of incomes should contribute significantly to a reduction of the risk factor involved in lending for purchase of homes by members of low income groups, and should therefore permit a reduction of mortgage interest rates and of the cost of guaranteeing these payments. Longer amortisation periods might be adopted if it is considered that the advantages of lower annual payments outweigh the need to maintain the lower payments for a longer period.¹

There is also a need for thorough investigation into the whole question of owning as against renting houses. It is often assumed that home-ownership is a desirable social aim. For a large number of people this may not be the case. Partly because of their wish to retain maximum freedom of movement, partly because of their expectation of either increases or decreases in their incomes in the future, partly because of unwillingness to hold their assets in this particular form, many people may prefer to rent houses rather than to own them. These preferences should be investigated, as they can be by suitable public survey, and Governments should ensure, either through private enterprise or their own activity, that houses to let and for sale are made available in appropriate proportions.

Finally, Governments should examine carefully the question of the incidence of local rates and other property taxation on costs of housing. So far as local rates represent proportionate taxation rather than the progressive taxation which is imposed in other fields, they appear to run counter to current ideas of social justice. It may be that they offer a convenient method of raising revenue and a convenient basis for allocating revenues to local governments and that, for these reasons, they should be retained; but it is doubtful whether even in this case, they should be retained without modification. In any case, a thorough investigation is required and, if they are to be retained, full allowance should be made for their incidence in drawing up schedules for income taxation and in determining rates for various indirect taxes on goods and services. In the field of taxation, Governments might also, as part of their general policy for full employment and rising productivity, examine the effects of taxation on incentives to efficiency, and might consider the possibility of adopting certain types of taxation in such a way as to stimulate enterprise and efficiency.

¹ The effects of varying interest rates and amortisation periods are set out in Chapter III, pp. 63-65.

Planning, Slum Clearance and Building to the Market

These aspects of housing policy are most conveniently considered together. It is in these fields that there is most hope of new developments in Government policy which might be effective as nothing else has been in ensuring the realisation of society's aims in the field of housing. Basic to action in this field is that the public authorities should have a thorough knowledge of the existing condition of housing. Sample or complete surveys can be made to establish the number, size, condition and location of all houses, and these surveys should be kept continuously up to date. The second essential is a continuous survey of the existing level of housing activity, of the level of wages, of costs of materials and of prices of houses, and of the possibility and desirability of expanding or contracting the building industry in the light of the level of demand for the products of other industries. Thirdly, a knowledge is required of immediate and prospective changes in the number and size of families, in the willingness of those families to spend on housing, and in the localities where they will want to live. Fourthly, the development of existing and of new centres of population should conform to over-all plans for the development of neighbourhoods, towns and regions. These over-all plans should be drawn up with due respect to the need for balancing the economic advantages of particular types and directions of development against the social, cultural and aesthetic advantages of different types and directions of development.

This information will provide an ample background for the planning of more and better housing with whatever degree of stability of output is desired. The most important aspect of housing policy is the need to convince all members of the building industry that the level of activity in the industry will be kept stabilised, except for such fluctuations as Governments decide can be absorbed by the industry without undesirable consequences. Full conviction on this issue will come only when stability of output has been experienced for some years — the time lag can be shortened the more quickly stability of output is achieved and maintained, and the more effectively Governments describe the basis of their planning. This requires, of course, that a satisfactory basis for planning should be established as soon as possible. In the first place, Governments should decide how many men are likely to seek employment in the building industry and what level of output of houses

could be achieved over the next few years by those men, assuming whatever increase in efficiency may be reasonable in the circumstances of the country concerned. They should then decide whether the community would wish to have a greater or lesser number of houses built, and whether and to what extent measures can be introduced either to encourage or to discourage recruitment of labour to the industry. On the basis of these judgments, they can decide what is the practical and desirable level of employment and output in the industry immediately and for some years ahead. The next step is to ensure, and to convince the building industry that the policy adopted will ensure, that there is a demand for these houses.

The total demand for housing activity will be made up of the net demands in different localities from newly established families, from families "doubling-up" with other families who wish to separate, from families living in overcrowded or slum conditions, and from families living in any existing houses, all of whom wish to improve the standard of their housing. There is thus an enormous potential demand for houses. What is more important is that, apart from newly established families, the demand is obviously highly elastic. This has been one of the major causes of trouble in the housing industry in the past, but this same elasticity may, with an appropriate housing policy, be turned to advantage. Instead of causing instability in the housing industry as it has in the past, it may now be turned into a cushion for the housing industry. The essential step is that Governments should use freely and flexibly their powers to condemn and to force the demolition of slums and substandard housing. They must convince the industry that if, at any time, the demand for houses for new families threatens to decline, the forced demolition of dwellings will be correspondingly increased and that the purchasing power necessary to permit displaced families to afford improved housing will be supplied. This policy implies that costs must be kept to a minimum so that subsidies will not be used to inflate costs and prices and that, if an undesirable boom threatens to develop in building activity, appropriate measures will be introduced to prevent it. Controlling a boom in building may, in view of the suitability of the industry as a field for speculation, be substantially more difficult than preventing a depression. Merely reducing demolitions will not be enough to prevent contractors who expect large markets for houses from expanding their activity. Such an expansion is likely to lead to an excessive recruitment of labour to the industry and an increase in costs, wages and prices

as a result of the competition to get scarce labour and materials.

Special machinery will need to be developed to cut short this typical prelude to a "boom and bust" movement, which will probably be a chronic threat to stability if a policy on the lines suggested is energetically pursued. To put a quota on each producer's output would tend to prevent the elimination by competition of less efficient producers. To put a quota on recruitment of building workers or on production of building materials would not prevent competitive bidding among producers for such resources as were available. To cut subsidies would defeat one of the main purposes of the housing policy. More effective measures will have to be devised.

In countries where a substantial part of building is done directly by public authorities, this problem will be less serious. In the first place, provided building by public authorities is kept stable, only a section of total activity will be subject to these fluctuations. In the second, provided the location, quality and cost of houses whose production is being expanded by private enterprise are satisfactory, activity by public authorities could perhaps be tapered off where this would not conflict with the social objectives of the community.

The more determined Governments are to maintain a high and stable level of building activity and the larger the subsidies which they grant, the greater will be the danger of an undesirable boom in housing activity carried out by private enterprise. If in these circumstances a boom does threaten to develop, Governments may try to do what they can by persuasion and publicity to control the situation. They may be able to control the level of building by controlling the allocation of building materials. They may use what power they have, or can assume, to control the lending policy of banks, insurance companies and building societies. Since working capital is of vital importance in building, particularly for the speculative builder, this may be a sufficiently effective control to prevent the boom developing. Finally, it may be necessary for Governments to license private builders, restricting them thereby to the building of a certain number of houses. If a system of licences is adopted, it will be most important to ensure that the restriction is not used either to cloak inefficiency or to permit an inflation of the prices of houses. Perhaps the most satisfactory method of achieving this would be for Governments, each year, to invite from all interested contractors tenders for the number, location, quality and prices of houses they are willing to build during the coming

year. The Governments could then grant licences to the builders whose proposals conformed best to the public housing programme. The licences would need to contain penalty clauses for any breaches of the contractors' undertakings, the penalties varying according to the cause of the breach, which would have to be determined, if necessary, by arbitration. The penalty would be heavy where the breach was caused by, say, the contractor's inefficiency, and be waived altogether where caused by, say, a Government decision to raise the wages of building operatives or to increase the minimum standard of housing. The reopening of tenders each year would encourage the maintenance of maximum efficiency and would permit the entry of new enterprise where it promised to be more efficient.

This system would have the great added advantage of giving Governments accurate advance information as to trends in the level and costs of building activity. On the basis of this information, they could frame their housing policies for the year, including in particular the amount of building which should be undertaken by public authorities.

Even where all or most building is carried on by public authorities, an inflationary trend can still develop unless the policy is properly administered. Such a trend will be particularly likely where building is planned and carried out by large numbers of semi-autonomous local authorities, competing with each other for scarce labour and materials and drawing extensively on the central Government for housing subsidies. Where the activities of local authorities threaten the stability of the building industry, they will need to be controlled just as much as private enterprise. Where the central Government has not the power to control directly the activities of local authorities, its financial power should be enough to give it, indirectly, the control it needs. It should be noted that the central Government will wish to exercise control in the field not only of the amount and cost of building activity by local authorities, but also of local rates, building codes, town and neighbourhood planning, location of industry, and so on. Local authorities must play a most important part in housing policy. While it is desirable that they should be given as free a hand as possible in planning local development, it is essential that the central Government should in the end be able, where necessary, to force a modification of local plans to conform to national housing policy. Conflicts will inevitably arise from time to time between the plans of different local authorities and, in these cases, only the central Government can make a decision in the national interest.

The question of what authorities are to be in charge of housing policy raises difficult problems, largely of a political nature. The main problem is how to secure the best compromise between, on the one hand, keeping housing policy flexible and open to public discussion and, on the other, freeing it from unnecessary and disturbing changes arising from short-run political considerations. Moreover, freedom to establish whatever administration is regarded as desirable will be hampered by the existence of more or less well-established public agencies already in the field. A possible solution might be to have the general aims and framework of housing policy determined after public debate at the political level, and then to assign its execution on as independent a basis as possible to some sort of commission or statutory corporation, whose directors would be appointed for a term of years by the Government and who would thereafter be free from political interference.¹

Provision will also need to be made within the housing policy for co-operative or mutual housing, which is becoming a popular means of obtaining houses for low-income groups in a number of countries. These co-operative ventures take many forms, their essential feature being the elimination of the profit factor from production costs. While this feature encourages a reduction of costs, co-operative housing does not in itself make any special contribution either to the stability of housing output or, unless carried out on a large scale and with good management, to the improvement of efficiency in methods of production. It is, however, worthy of encouragement as a form of individual and community effort in overcoming the problems of housing.²

Serious problems will arise in the development of housing policy in the field of controlling the use, the value and the acquisition of land, and in determining procedures to be followed and compensation to be paid when clearing slums and other substandard housing. The principles adopted will differ widely from country to country according to differences in political and social philosophies. Should the owner of a slum area be com-

¹ This housing commission, could, for example, be composed of eight members, two representing employers, two representing workers and four appointed by the Government, including an architect and a representative of consumers.

For a discussion of the problem of the form of public administration in relation to the maintenance of free choice by consumers, see, for instance, Barbara WOOTTON, *op cit*

² See INTERNATIONAL LABOUR OFFICE : *The Co-operative Movement and Present-Day Problems*, Studies and Reports, Series H, No 5 (Montreal, 1945), pp. 67-77.

pensated on the basis of the income he loses when the slums are pulled down or on the basis of the value of the land when it is developed at the new, socially approved density? Should the owner of agricultural land which, as the result of, say, a town-planning decision, is to become the site of a new town, be compensated on the basis of the value of land for agriculture, or on the basis of its new urban value? For problems of this sort, the solutions appropriate to each country will be best established by thorough and impartial investigation followed by full public debate.¹

Improvement of Real Incomes

The basic necessity in policy designed to increase the power of the community to purchase houses is the raising and stabilisation of the incomes people earn from their employments. The nature of the problems involved in securing full employment, rising productivity and more equitable distribution of incomes has been discussed in Chapter II. Policy designed to secure these ends will have many facets, but it must be emphasised that housing policy can, if desired, itself be one of the most important elements of such a general economic policy. The housing

¹ See, for instance, the well-known United Kingdom reports on these problems : ROYAL COMMISSION ON THE DISTRIBUTION OF INDUSTRIAL POPULATION. *Report* (1940) (the "Barlow Report"); MINISTRY OF WORKS AND PLANNING. *Report of the Committee on Land Utilisation in Rural Areas* (1942) (the "Scott Report"); MINISTRY OF WORKS AND PLANNING : *Final Report of the Expert Committee on Compensation and Betterment* (1942) (the "Uthwatt Report"). All the reports are published by His Majesty's Stationery Office. For discussion of various aspects of planning and housing policy, see Donald TYERMAN (ed.) *Ways and Means of Rebuilding*, a Report of the London Conference of the Town and Country Planning Association, 1943 (London, Faber and Faber Ltd.).

Note in particular the provisions of the United Kingdom Town and Country Planning Act, 1947. This Act, designed to secure the best social use of land in accordance with co-ordinated planning on a nationwide scale, provides in effect for the nationalisation of most of the profits from the development or improvement of any land. Since 1 July 1948, when certain parts of the Act came into effect, permission has had to be obtained from the Minister or local planning authority before any development of land (with certain exceptions) may be proceeded with; and a development charge must be paid. Where land is compulsorily acquired by a Government department or local or public authority, the compensation payable will normally be the "existing use" value of the land — that is, the current market value less the development value. Owners of land which suffers a depreciation in value because of the Act may receive compensation out of a fund, the payments from which in Great Britain are limited to £300 million.

industry is important in its own right as a direct and indirect employer of labour. Its market is capable of substantial and prolonged expansion. Its fluctuations, which have been so great in the past, have multiplied effects throughout the economy. If it can be stabilised at a high level or, even better, if it can be made to fluctuate counter-cyclically, it will not only itself offer a high and more stable level of employment but will also have a highly significant effect in stabilising the general level of employment. In other words, a high and more stable level of output in the housing industry can probably make a greater contribution to the achievement of stability throughout the economy than in the case of any other single industry. Similarly, a reduction of the degree of monopoly in certain sectors of the building industry and an increase in efficiency could make a major contribution to raising productivity and to improving the distribution of incomes. Finally, any redistribution of incomes is likely to increase total expenditure on housing since the marginal expenditure on housing is greater for the lower income groups than for the higher income groups. For instance, family allowances in particular will help large families to afford the large houses they need. The increased expenditure on housing will be greatest when the redistribution of incomes takes the form of housing subsidies, all of which are spent on housing.

Housing policy has, therefore, a self-reinforcing character. To achieve and maintain a level of effective demand for houses, sufficiently high and stable to permit the improvement in housing to make its full and due contribution to the central economic problem of raising living standards to the maximum, one of the most effective instruments would be to maintain a high and stable level of efficient housing output. This thesis has the simple appeal of the obvious. It is, of course, true in some degree of any industry, but the large proportion of total expenditure that is allocated to housing and the suitability of the industry for public control and planning make this thesis particularly significant for the housing market.

Housing Subsidies

Although housing subsidies are an essential feature of housing policy, they should be, essentially, a residual feature. They are a measure of the failure of the economy to achieve, on the one hand, a sufficient reduction of housing costs and, on the other, through full employment, rising productivity and elimina-

tion of monopoly, a sufficient increase of incomes of its lower-income groups, to permit its people to meet their housing needs out of the incomes they can earn. No doubt, even with the most successful Government policy in these other fields, some families would still require financial assistance to permit them to enjoy adequate housing. Too often, however, there is a tendency to introduce systems of housing subsidies without paying adequate attention to the possibilities of action in other directions. Governments may be unable or unwilling to tackle the formidable administrative and political obstacles that stand in the way of an effective housing policy. They take the easy way out by granting subsidies which, as they have been used in the past, cover up rather than contribute to the correction of the defects of the housing industry and of the economy in general. Public criticism concentrates on the adequacy of the subsidy rather than on the efficiency of the economy, while unnecessarily large numbers of consumers are forced to become recipients of public charity instead of being able to enjoy adequate standards of living out of the income they earn from their work.

The housing subsidy has an important part to play but it is a specialised part. In the first place, a subsidy can be of great use at a time like the present when, on the one hand, costs are abnormally high as a result of the scarcity of materials and labour and of the general disorganisation of the industry as a result of its wartime suspension ; and, on the other, an abnormally large number of families are in urgent need of homes. In the absence of a subsidy, families who are forced to buy or take long leases on new homes now will be at a distinct disadvantage in relation both to families who have had homes from before the war or who can get homes at nearly pre-war rents, and to families who will buy or lease homes in the future when costs and prices may be expected to fall as supply becomes more equal to demand.

Secondly, a subsidy is also desirable to offset housing costs arising specifically from public policy. For instance, if the building of houses of acceptable standard in a certain location involves the purchase and clearance of a slum area, substantial compensation may have to be paid to the owners of the area to cover their loss of income. If the new development is built at a substantially lower density, as will almost certainly be desirable, it will place an intolerably heavy burden on the prices or rents of the new dwellings if the sum paid for the land has to be recovered. The charge on the development for land should be determined by the value of the land when built up at the current density rather than at the previous anti-social

density. It would, of course, be simple if the compensation given to previous owners did not exceed this figure. If, however, the attitude of the society is that previous owners must be compensated to a greater extent than this, it is reasonable that the extra cost should be carried by the community as a whole, rather than by the individuals who happen in the future to live in the particular area. Similarly, if families have to dispose of their existing houses at depreciated values, because of a shift in population centres which will result in higher productivity for the economy, it is reasonable that part of this cost to families involved in the move should be borne by the community at large which benefits by the move.¹

Thirdly, since housing of minimum adequate standards involves a relatively large expenditure, there will always be some families whose earning power is not high or stable enough to permit them to meet the costs of their housing. If the community decides that all families should have a certain minimum housing standard, it can make this decision effective only if it is willing to contribute to the cost of this standard. The cost of subsidisation will vary according to the standard of housing desired and, most important, according to the success of the policy designed to reduce costs to the minimum and to raise incomes, particularly of the lower income groups, to the maximum. The decision to pay subsidies is in effect a decision in favour of a certain measure of redistribution of incomes such as is already going on through social services financed by progressive taxation. It is as well to keep this fact in mind because it helps towards solving the problem of the manner in which the subsidy should be paid. Some of the redistribution already taking place is done by a direct subsidy to income as in the case of old-age pensions and family allowances. Some is done by subsidisation of particular services as in the case of education and health services, free lunches for school children and so on. The housing subsidy is in this latter class and represents a decision partly that a subsidy to housing is an administratively and politically convenient way of redistributing incomes, and partly that housing is a branch of expenditure particularly in need of subsidisation.

This statement of the various purposes of the housing subsidy offers a basis for approaching the problem of the way in which and the conditions under which subsidies should be paid. Two important questions arise : what should be the

¹ This refers to the sort of shift of population which is described on pp. 123-124 of this chapter.

amount of the subsidy ; and how can Governments ensure that the subsidy fulfils the purpose for which it is granted and that it is not dissipated instead in inflating costs and prices ? For the first class of subsidy, where payment is made to offset the abnormally high costs of a period like the present, the subsidy should clearly be related to the cost of the house and the degree of abnormality of housing costs. If the pre-war level of costs is taken as a norm, the extent to which housing costs have increased since the war began should be compared with the extent to which all costs and incomes have increased ; or better still, with the level at which costs and incomes are expected to settle as a post-war norm. Suppose it is established that building costs have increased during the war by 75 per cent., while costs and incomes generally have increased only 50 per cent. Then it might be decided that a house the cost of which had risen from \$5,000 to \$8,750 should be subsidised to bring its price down to \$7,500. This type of subsidy could, if desired, easily be restricted to any particular group of houses, according to size, to cost or to whether they are built by public or private enterprise. Any such restriction would, of course, introduce the different principle of redistribution of incomes on social rather than on strictly economic grounds.

At a time of great scarcities and heavy pressure of excess purchasing power, it will be difficult to ensure that the beneficial effects of the subsidy are not dissipated in driving up costs and prices. If the subsidy is restricted to homes of types suitable only for certain income groups, and if, as is likely, those groups are not the ones in possession of excess purchasing power, the problem of inflation should not be serious. The only problem then will be, through control of materials and, if necessary, through direct building by public authorities, to ensure that homes are built for these groups and that the entire resources of the building industry are not instead devoted to meeting the needs of members of higher income groups who can pay fancy prices. It would be an added protection against inflation if Governments made it clear in advance that they would follow closely movements in building costs and would promptly reduce the subsidy as fast as any inflationary tendencies developed. It would also seem desirable that an announcement should be made in advance that the subsidy would be reduced from period to period in accordance with the rate at which currently abnormal costs are expected to return to normal. In this case, the amount of the subsidy to be paid on a particular house should be determined by the time at which the house is built,

not by the time at which the contract for its construction is made. In the section dealing with reductions in costs, it has already been suggested that Governments themselves can contribute significantly, by research and by example, to speeding up cost reduction.

In the second type of subsidy, where the community is to bear the excess costs of acquiring land for housing development, it has already been suggested that the amount of the subsidy should be sufficient to reduce the cost of land to the level appropriate to the density at which it is to be developed. Serious problems will arise as to the possibility of inflation of the value of sites affected, or expected to be affected, by Government housing policy. Control of this type of inflation will require control of land use and land values such as was mentioned in the last section.

The third class of subsidy, where lower income groups are unable to meet the normal costs of house construction, is by far the most important class. It is impossible to generalise on the extent to which subsidisation should be carried, as that will be determined in each country by the minimum housing standards regarded by the community as acceptable for various groups. This standard can be expected to rise progressively with the development of social conscience and with the increasing real income of the community. As housing costs fall, the realisation of any given standard of housing will cost less in subsidy. This will itself probably encourage a more rapid rise in the minimum housing standards that will be sought by the community. The concept of a socially acceptable minimum standard is not, of course, measurable and will find expression only indirectly through the various political pressures which play on Governments and determine their policies. The debate will be a three-cornered one between taxpayers seeking reductions of expenditure, housing reformers pleading that better housing will contribute more than anything else to an increase in welfare and a reduction of crime and disease, and the champions of all other avenues of expenditure pleading that increases in their own particular fields would make a greater contribution to welfare. This debate should be as free, as sustained and as well-informed as possible, for only so will the pace of housing reform be kept at the maximum acceptable to the community. It must always be remembered that housing subsidies represent essentially arbitrary decisions by Governments to allocate to house building for lower income groups a greater proportion of total resources than would be chosen by the community either

in the absence of this degree of redistribution of incomes or, presumably, if the same degree and direction of redistribution of incomes were effected in any other way, for instance by family allowances. Governments will, therefore, do well continually to assure themselves, through public discussion, that their policy is not diverting to housing either more or fewer resources than are really wanted in the housing industry by the community.

Preventing these subsidies from exerting an inflationary pressure on costs and prices should be an important feature of long-term housing policy. It has been repeatedly emphasised that the maintenance of a high and stable level of activity in the building industry is an essential condition of reduction of costs. But it has also been pointed out, in the previous section, that this very policy may, unless carefully administered and controlled, lead to an inflation of costs and prices, as builders seek to expand their output and as producers of materials and workers seek to take advantage of the high level of demand to raise their prices and wages. The subsidy is a vital element of policy designed to raise and stabilise the level of building activity and, wherever convenient and practicable, it should have attached to it conditions which will assist Governments in their efforts to keep down prices. The most drastic action would be to confine the subsidy exclusively to houses built by public authorities whose output, efficiency and price policy could be controlled in accordance with general housing policy. But it may be possible to do better than this by paying subsidies in respect of houses built by private builders, attaching such conditions as will encourage these private builders to contribute effectively to the realisation of housing policy. Thus, payment of subsidy might be confined to houses built by contractors who, by mass production or by the expanded use of standardised parts and prefabricated units, produce houses of prescribed standard at prices within prescribed ranges. It should also be remembered that such conditional subsidies might be used with advantage by central housing authorities to stimulate the efficiency and efforts of local authorities who must, to a large extent, be left to carry out actual building and planning operations.

FORMS IN WHICH SUBSIDIES MAY BE PAID

Subsidies may be paid in many different forms. For instance, a decision must be made as to whether to pay subsidies in the form of capital lump-sum payments or annual payments over a term of years. This distinction is largely a matter of

book-keeping as both types involve some redistribution of income and result in lower annual cost to the occupier. However, the distinction is of some significance. It is clearly desirable in housing policy to determine what might be called the economic cost of a house and what its economic rent should be. For this purpose it would be desirable, for instance, to exclude costs incurred in acquiring a slum area for clearance, or in shifting industries and population centres from one location to another. Similarly, since houses built at current abnormally high costs will eventually have to compete on the open market with houses built earlier or later at more normal costs, it would be desirable that any subsidy that is paid on them should be paid as a lump sum, immediately reducing the price that can be accepted for them to something approaching the normal figure. The payment of lump sums in these cases helps, moreover, to simplify administration. In the case of shifts of population and slum clearance, different subsidies will be required for different transactions and it would be inconvenient to have to work out and to pay different sets of annual subsidies for each. A lump sum payment will permit each transaction to be written off immediately. Similarly, in the case of subsidies to meet abnormally high costs, the amounts to be paid will differ substantially from time to time, and again it will be more convenient to make a lump sum payment than to pay a large number of different annual subsidies.

The third and most important class of subsidy has, however, as its main aim a redistribution of incomes which is considered necessary because certain families are unable to meet the economic cost or the economic rent of the houses they need. It would seem desirable, therefore, that the annual economic cost of these houses should be calculated and that subsidies should be paid to whatever extent is required by particular families or groups of families.

Subsidies may be paid at a flat rate for all houses or at differential rates for different houses or for different tenants. The criteria by which subsidies may be judged in this respect are their simplicity of administration, their economy of total expenditure and the extent to which they encourage the efficient output of houses in the numbers, locations and types needed to carry out housing policy.

The flat-rate subsidy. The simplest form of flat-rate subsidy is where a fixed amount, either a lump sum or an annual payment for a fixed term of years, is paid in respect of any house built,

without any further conditions. This type of payment certainly reduces the administrative problem to a minimum and may encourage an increase in the output of houses. However, since it offers no incentive to efficiency, it is not likely to be economical in its total cost, much of its effect is likely to be offset by inflationary developments and, in itself, it will do nothing to encourage the building of houses of the types and in the locations needed to carry out housing policy.

The restriction of this type of subsidy to houses built by public authorities, to houses which, whether built by public or private enterprise, are leased within stated ranges of rent, or to houses of a certain size, removes some of the disadvantages and inflexibility of this type of subsidy while still retaining a high degree of administrative simplicity. The United Kingdom, for instance, has usually relied on a flat-rate annual subsidy restricted at different times to one or other of these conditions.¹ British experience after the first World War shows the tendency for this type of subsidy to inflate costs and prices, and its inability to stimulate the efficient production of houses of the types and at the locations needed.²

The differential subsidy. Differential subsidies might be paid, varying with one or more of the relevant factors such as the income of the family, the size of the family or the cost, the size or the location of the house. While these differentials will immediately complicate the problem of administration, they offer opportunities for economy and for stimulating the better use of available resources in carrying out housing policy.

¹ The current subsidy in the United Kingdom consists of a flat-rate annual payment, payable only in respect of houses of certain minimum standards, built by public authorities. There are some differentials introduced, notably for blocks of flats, rural houses and houses built on expensive sites, but these make no fundamental infringement of the flat-rate principle. The subsidy is composed of a contribution of one quarter from the Rate Fund and three quarters from the Central Exchequer. It must be noted, however, that there is, as well as this subsidy scheme, a substantial amount of control of building by the Government, directed in particular to the limitation of the number of houses built by private builders and for higher income groups, to the provision of a large number of houses to let rather than for sale, to the recruitment of new workers to the industry and to the development of new towns in conformity with plans for location of industry and for the better distribution of population.

² On British housing experience in the inter-war period see MARIAN BOWLEY: *Housing and the State, 1919-1944* (London, George Allen & Unwin, 1945), Part I, particularly Chapter IV, which deals with the location of houses built by local authorities; and W. F. STOLPER: "British Monetary Policy and the Housing Boom" (cited earlier), particularly Chapter II, which deals with the cost of building.

One important type of differential subsidy is that which relates the rent subsidy to the income of the recipient. Minimum and maximum standards would need to be laid down for houses on which subsidies would be paid and, if these standards were varied according to family size, the subsidy could be made to vary with the size of families. A limitation on the size of income eligible for subsidy could also be established. The objections to this type of subsidy are, on the one hand, the administrative inconvenience and, on the other, its reliance on the much disliked means test.

The Australian Government has recently introduced a rental rebate scheme along these lines. The basis of this scheme is that the ordinary unskilled worker, receiving the "basic wage", is paid whatever rent rebate is required to bring his net payment of rent down to one fifth of his income. If his income is less than the "basic wage" the rent rebate is progressively greater; if his income is more, the rent rebate is progressively smaller. The subsidy is payable only on houses for rent. It provides comparatively generously for the lower income groups whose need is greatest, and rapidly diminishes as incomes rise.¹

¹ In this Australian scheme, provision is made for the prescription of minimum and maximum standards. Houses are to be constructed according to these standards by State Governments or by authorities created by those Governments. The "basic wage", which is the basis of the scheme, is the wage determined by industrial courts as a reasonable living wage for the unskilled worker. The unskilled worker is in fact usually paid at this rate, relatively small margins being added for semi-skilled and skilled workers. The "basic wage" is therefore much nearer to the actual average wage than is the minimum wage in other countries. This fact gives greater significance to the rental rebate policy introduced in Australia.

The basis for determining the "economic" (or gross) rent is prescribed in the Act (the Commonwealth and State Housing Agreement Act, No. 44 of 1945). The interest rate charged is that payable on Commonwealth Government loans and the amortisation period is long, 53 years. Economic rent also includes maintenance, rates and taxes, insurance, allowance for vacancies and defaults, and administration. If the economic rent due from a "basic wage" family exceeds one fifth of its income, the entire excess is paid as a rent rebate. If family income is less than the basic wage, the rebate is increased by one quarter of the amount by which the family income falls short of the basic wage. If family income exceeds the basic wage, the rebate is decreased by one third of the amount by which the family income exceeds the basic wage. The rebate is granted on application by tenants; family income and eligibility for rental rebate are reviewed every six months. Losses incurred on housing projects by State Governments are allocated as to three fifths to the Commonwealth and as to two fifths to the State.

To illustrate the effects of the formula, "basic wage" may be taken as 100 shillings per week and economic rent for a typical worker's house as 25 shillings per week. A family receiving just the basic wage would

There are many possible variants of this type of subsidy related to income, family size and so on. A number of countries have introduced systems of differential rents for public housing projects, although usually only on a fairly limited scale. A common defect, however, has been that too often the determination of rent has been left to local authorities, each following different principles. Moreover, in most cases the rents received from a project or group of projects as a whole have been expected to meet all or a prescribed proportion of total cost. It has not been possible, therefore, to introduce rent differentials sufficiently large to meet fully the disabilities of individual families. Too great a burden would be thrown on other tenants of the project. It seems preferable to have the principles by which the proportion of family income to be paid in rent is determined laid down on a nation-wide basis with suitable provision for local variations, the costs being carried out of general revenue rather than by other tenants affected by the scheme.

This type of subsidy is based directly on the aspect most vital to housing policy — the income of the tenant. In effect it puts directly into his hands an income which he can use only for housing, the amount of the subsidy being determined by the difference between the rent he has to pay to get housing of the standard prescribed by the State, and the part of his income which the State considers he should be expected to pay for housing.

This system has significant advantages over other types of differential subsidies such as tax exemptions and reductions, specially low interest rates and so on. In these other types, the subsidy is related to the cost of the house and, even if the subsidy is substantial, there is no guarantee that net prices will be sufficiently reduced to enable all families to afford reasonable housing. Indeed the most likely result is that the benefits will be largely confined to the middle income groups and to the upper brackets of the lower income groups. The remaining lower income groups will still be able to pay only for sub-standard slums. There is an upper limit to the total amount that any community will pay at any given time for an improve-

receive a rent rebate of 5 shillings and would pay a net rent of 20 shillings. A family receiving 80 shillings a week would receive rent rebate of 5 shillings plus a sum of 5 shillings, one quarter of the amount by which its income is less than the basic wage. The net rent payment would be 15 shillings. A family receiving 40 shillings a week would pay net rent of only 5 shillings. A family receiving 115 shillings a week would receive no rent rebate as its income exceeds the basic wage by just three times the basic rent rebate.

ment of housing conditions. The more the distribution of that amount is concentrated on the lowest income groups, the greater and more satisfactory will be the results. Even if some upper limit is set to the cost or type of house eligible for subsidy, the amount of subsidy granted under, say, a system of reduced interest rates actually increases with the cost of the house and therefore, presumably, with the income of the occupier. The flat-rate subsidy gives the same amount of subsidy regardless of the cost of the house. Only a subsidy that varies inversely with income can concentrate the subsidy where it is most needed.¹

THE FINANCE OF SUBSIDIES

The problem of how to raise revenue to pay housing subsidies is best considered not by itself but as part of the general financial policy. The central aim of economic policy is to promote full and stable employment and maximum living standards. The money required to finance this policy should be raised by whatever combination of the various forms of taxation and of borrowing will contribute most to, or interfere least with, these social aims.² Housing policy is part of the general economic policy and it should be financed according to the same general principles.

Within these general principles, one special aspect of the finance of housing subsidies should be noted. The nature of housing policy is such that its execution must be left largely to local authorities, subject to only limited control by central Governments. Since these local authorities will be spending large amounts of public money, it is desirable that they should do so with a full sense of their responsibility. It may be that one way of inducing in them this sense of responsibility would be to require them to raise a substantial proportion of the money they have to spend. If this is done, central Governments, while giving local authorities access to adequate fields of revenue to permit them to raise the money they need, will need to take steps to ensure that they use their revenue-raising powers in ways which will not conflict with national economic and financial policy. It will, however, probably be preferable that

¹ On the experience of various countries with different types of subsidies, see INTERNATIONAL LABOUR OFFICE : *Housing Policy*, *op. cit.*, pp. 12-19; Marian BOWLEY. *Housing and the State*, *op. cit.*; Elizabeth DENBY, *op. cit.*, and Charles ABRAMS. *The Future of Housing* (New York, Harper & Brothers, 1946), particularly parts III and IV.

² See Chapter II above.

the main part of local authorities' revenues should take the form of central Government grants, to which conditions can be attached which will ensure that local housing policy is consistent with national policy. Central Government grants are the more desirable for the reason that local authorities in districts where housing conditions are worst will be least able themselves to raise revenue to improve those conditions.

SUBSIDIES AND HOUSING POLICY

In conclusion, it must again be repeated that subsidies alone do not make up an adequate housing policy. They are a vital and essential part of such a policy but they cannot by themselves solve the housing problem. Money spent on subsidies will yield a satisfactory return in improvement of housing conditions only if it is backed up with vigorous action by both Governments and private enterprise to reduce costs and improve methods of production, to get houses built in the numbers, types and locations needed, to plan the development of housing, to eliminate slums and to raise the incomes and productivity of the whole community.

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